SOUTHEAST AREA (ELECTRIC) INTERIM FIELD CONFERENCE

THE GEORGIA HOTEL

ATLANTA, GEORGIA

MARCH 15 - 19, 1954

MODERATOR - JOHN H. SCOLTOCK, AREA DIRECTOR

LIST OF THOSE ATTENDING THE CONFERENCE

Henry M. Alford

James W. Black

Roland A. Blass

Clifton J. Bradley

Dorland Bridgland

Alexander Casanges

Max U. S. Colbert

George H. Cole

John B. Coon

Elmer A. Corum

Eugene V. Dabney

James B. Davis

Charles B. Delancey

Odea Evans

George T. Gilleland

Jeter L. Harrell

E. A. Loetterle

Earl M. Lynch

Leo A. McCarthy

Joseph H. McCombs

Jennings B. Mabry

Richard F. Nance

James H. Phillips

John H. Scoltock

Julius S. Strojny

Fred H. Strong

Jane S. Taliaferro

Frank V. Turney

F. Allen Vardy

ADDRESS BY FRED H. STRONG, DEPUTY ADMINISTRATOR

I am very happy to be here with you today. Mr. Callaway sent down with me a list of items suggested for discussion.

First is "emphasis on the loan security problems in the coming year." This ties in with the power use program and the Chicago conference. To summarize the loan security situation, while delinquency is extremely light (as of December 31, 1953, delinquency was 12/100 of 1%; very few banks can come up with that record) --- this is on a cash basis. On an accrual basis, about one-fourth of the electric borrowers are heading for trouble, and the time is not too far away. The five year grace period on debt payment is just about up for a lot of them. They will hit their repayment peak in the next few years.

At the last check, approximately 250 borrowers are prospectively in difficulties. In some cases it is a management problem; in other cases, it is a rate problem. In many cases, really the majority, it is the need to get out and build load. In that connection, when we talk about power use, we are talking about building load. Cooperatives are in the business of selling electricity. The more they sell, the better financial shape they will be in. Equipment, appliances, lights, etc., all are necessary to boost the consumption of rural power. We are not deeply worried about the eventual outcome. We think there are very few cases which make up the major loan security headaches that can't be relieved by work on the part of REA, the borrowers, and all those in industry who have an interest in the situation.

The Chicago power use conference, we believe, was a step in the right direction. There were about 60 representatives of the statewides' cooperative organizations and individual cooperatives, about 70 representatives of leading manufacturers of appliances and electrical equipment, and about 20 representatives of utility companies.

We sat around in perfect harmony and discussed the one problem of common interest -- load building.

Our reason and interest for setting up the conference was that the federal government has an interest in load building. It is to the interest of REA that we do not have security problems. It is to the interest of the cooperatives to have the confidence that they can pay back the money they borrow. It is to the interest of the utility companies to build load and sell more electricity to the cooperatives because these cooperatives are getting to be among the big users of wholesale electricity. It is certainly of interest to the manufacturers to help build load: they are looking for a market. Our surveys made in cooperation with industry and reliable survey agencies reveal that the rural market is the biggest untapped market these manufacturers have. Everyone at the conference admitted to the self interest involved.

At the Chicago conference several committees were appointed. These committees, in turn, named two delegates each to a central steering committee, with REA providing the chairman. We will meet in May, bringing together

the ideas each group has come up with during the meantime to set up the most extensive load building program in history. We hope to take advantage of the trained sales efforts that can be found at the top level in the manufacturing field and in the utilities. We believe we can build load; and as it is put out on the lines -- whether they are cooperative lines or private utility lines -- we all will be better off. The more we can do to enable both cooperatives and utilities to provide that service on a better basis than now provided, regardless of how good it now may be, the better we see to it that rural America is adequately served with electricity. Also, at the same time, we relieve our headaches on loan security.

The next item on Bill Callaway's list is "what is REA's policy on reimbursement of general funds." Down through the years, work order construction has been reimbursed. However, REA never set up any accurate record in the past for knowing in total how much has to be reimbursed. There is no quick way now of determining accurately what that total amount is. We do not want to encourage borrowers to remain dependent on REA for the rest of their economic lives. It is much better for them to attain financial independence so that eventually they will be independent corporate units in the American enterprise system. It should be our aim to speed them on the road to that independence. It is regrettable that in the past there seems to have been an effort to keep them dependent on REA for money which often they did not need. We are in the position of reimbursing cooperatives for work order construction when in some cases those cooperatives have funds in excess of their actual need -- in some cases in excess of a half million dollars. They could remain permanently in debt in that fashion, permanently under the regulation of REA. This is not good, and it is not pointing in the direction that we say and they say they are going. They should be in such financial shape that they can in fact stand on their own feet and guide their own affairs. I believe they have the ability, and anything we can do to help accomplish this is to the good.

For the current fiscal year, the long-planned loan program was $125,000,000. After an early check, it was boosted to $135,000,000. Present indications are that the loans to be made this fiscal year will total somewhere between $150,000,000 and $165,000,000. This will tap the contingency fund, possibly to the limit. Most loans are for the heavying-up of lines, and for member extensions. Because it now appears we will be lending substantially more than the long term program originally called for, we must not be too generous where the cooperative is not in actual need of the money. There, let's proceed slowly. Where it really does need the money, let's expedite it. Let's use judgment in handling this so that we don't deprive a borrower of money it actually needs. If they have a lot of cash money in the bank, let's not expedite the loan where general funds are adequate to carry through to the next fiscal year.

The next item is "REA's policy and the factors to be considered in connection with generation and transmission applications." There never have been any guide lines written for G and T loans of a supplemental nature; only for the first loans. The guide lines that would cover this can be and should be identical to those that govern the first loan.

What are these guide lines? Start with the law itself. The law says REA has the right and duty to make loans to get central station electric service into unserved rural areas. An area which may have central station electric service but not enough to meet its need would fall into the same category. It should include areas that have inadequate electric service as much as those that have none. Another element is the question of rates. REA has construed this to mean that we will make loans where the making of loans for either distribution or generation will serve to reduce the cost of power to the rural user. This is a very sound and safe determination. Were it not for that, we would be on safe ground in assuming that the electrification of the rural areas would not have proceeded as rapidly as it has. It is the element of competition that has brought about the almost complete electrification of rural areas. 90.8% of all farms were electrified as of last June 30. We estimate that between 94% and 95% will be electrified by this June 30.

The things we have to consider are these: Will the loan provide needed electricity? Will it provide electricity at a lower rate? Can the loan be made on a basis of feasibility? Will the loan money, in the judgment of the Administrator, be repaid to the government? The Administrator takes his oath of office to see to these things. When he signs approval of a loan, (or those he has authorized to sign for him sign it), he takes upon himself a very grave responsibility, a responsibility that amounts in terms of total dollars now to a couple billion dollars. That is a responsibility that affects the economic welfare of the whole country. So it behooves the Administrator, and everyone on the REA staff, to make sure that in their best, most honest and sincere judgment, the facts that they come up with are sound, honest facts. Only on that basis can the Administrator feel that his signature affixed to that document is an honest signature.

Regarding the question of rates, how can you determine whether the loan will provide lower rates than would otherwise be obtainable? This is a matter for the engineers and statisticians to determine. On occasion in the past, but only on occasion, the estimates of future load have been way out of line with the actual fact. I have seen in the files of REA load growth charts made in the field, and then new arbitrary lines drawn in. When this happens, and revenues fall short of estimates, the generation and transmission cooperative is in desperate trouble, which means that REA is in trouble. There is doubt that the loan can be repaid. Had the original load figures been followed, the loan would not have been made as it would have shown that it was not feasible. Today the load is not there to back up the loan, and the result is that the farmers are faced with a rate that is almost prohibitive.

At the annual meeting of NRECA in Miami an entire board of directors and the manager of one distribution cooperative came in to meet with Mr. Nelsen and me. They wanted to know how they could "get out from under"; how they could break away from their own generation and transmission cooperative. They will have to pay close to twice as much for electricity from that generation and transmission cooperative as they could buy electricity from a private supplier, they said. They could get a contract from a private supplier, but they are stuck with a 35-year contract with their own cooperative.

There have been a number of such cases in the last half-dozen months. The economic picture is changing. Utility companies are putting in bigger plants. Increasing consumption has enabled them to reduce the cost of electricity. Meanwhile, generation and transmission costs have remained constant or declined only slightly. Whereas the generation and transmission supply they borrowed to establish a few years back may have seemed the best answer at that time, today it is the answer they wish they did not have.

We must use extreme care to determine that it is the best way for users of electricity in a particular area. Too many times we find that these generation and transmission cooperatives are the brain child of big promoters, not the users.

If the things we do reduce the cost of power on the farm, those things are right. If they increase the cost of power, they are wrong.

The next item is "the proper relationships between electric and telephone borrowers." This is a rather broad subject. Experience during the last several years has shown it is not good or wise for the electric borrowers to do much more than encourage, where necessary, the formation of cooperatives to provide telephone service. We have one case where the manager of an electric cooperative was induced by his board of directors to take on the job of helping to set up a telephone cooperative. He had been a very capable manager. His own cooperative had an excellent DSER record. He took on the job and found it too much to try to handle both at once. Now the electric cooperative is in extremely poor shape. We had to make as a condition of their last loan the enactment by the board of a resolution directing the manager to get out of telephone activities. In that particular case, the telephone cooperative has not yet come into operating existence. It is just in the formative stage.

A telephone cooperative is a very complicated business. Feasibility is a lot skinnier than it is on an electric project. There is always opportunity in the electrification field to count on increased use of electricity. In the case of a telephone cooperative, it does not make any difference how many more telephone calls are made; the revenues don't increase. We urge that with the exception of advising the people of the area how to go about getting telephone service, that electric cooperatives, their boards and managers, stay out of the telephone field. The two together make too big a job for any one man to handle. Each is a full time proposition.

I would like to see, and hope to see, a very high degree of cooperation between electric cooperatives and telephone companies and cooperatives from the joint use of facilities angle. It is essential that costs be held down to whatever minimum can be found. We have to get the cost of telephone installation down. At the present time many of the applications we have on hand will not result in loans because feasibility is not there at rates people can afford to pay. Recently in Minnesota we stretched a point to make a loan - it included a resort area, people were coming in to it, etc. The rate called for $4.50 a month for a multi-party line. It was turned down by the state commission because the rate was too high. All the work

that had gone into that loan was for nothing. Even though REA made the loan, the state turned it down because the monthly rate to the subscriber was too high. We have to get the costs down, and joint use with either independents or cooperative borrowers will help to do it. I have said joint use meant joint use of poles, but perhaps it can mean the lines themselves as well. Progress has been made towards the carrier system where you use existing lines to transmit telephone messages. It is also conceivable that in the next ten years a means of radio communication can be brought into being. When they do, we will jump at it. It may be a means of completing the communication system in the rural areas.

Mr. Callaway says that you may be interested in the status of the Southeastern Power Association regarding the Clark Hill power situation, and the position REA will take in that. I came down here to inquire about that myself, so for the time being we will skip over that.

The next is a glimpse into the future for the field staff. We have a job to do in REA. Even though at the end of the fiscal year we anticipate that between 94% and 95% of the rural areas will have electric service, this does not mean the job is done. The use of electricity in both urban and rural areas will keep on increasing. This will mean heavying-up, improvements, etc.; it means everything that works for the betterment of rural electric service.

I told you of the increase of loans, and I told you about the possibility of it going up to $165,000,000. Without revealing any top secret, I can say that it looks as though the planning program which was set up some seven, eight or nine years ago has missed the boat along about now. It is too low and will have to go up -- for heavying-up, for member extensions, and for some generation and transmission loans. The latter we are going to scrutinize with the utmost care for one reason above all others: we don't want to stick the farmers with high costing power. All these things point to an expanding activity, in the field particularly. Also, there is need for attention to loan security problems, and to the management end.

Now, it says here that you would like to have a question and answer period, and I think that is a very good idea. I have some questions myself, but I'll be glad to answer yours if I can. I want to go into the Clark Hill power situation. There is a lot that I don't know about it. It seems to me that a supposed principle is the focal point of attention down there. Should the Clark Hill power be sold only to so-called preference customers, or to a utility company for preference customers, or just to a utility company? I don't know how it is there, but on most federal hydro systems you do not have a year round firm supply. It has most value as peaking power, and when used for peaking, it serves to reduce the capital investment for steam plants. I don't know the exact figure, but there are not many hydro facilities that can run year round. They do not have that much water backing them. I've checked a number of dams, and the average ran around 165 days a year. If hydro is to be used as firm power, peaking would have to be provided by steam plant installation in many cases, adding to the net cost to the user.

I personally don't care who they sell to as long as it contributes to the lower cost of electricity.

What we want is what is best for the farmer. I don't know what the answers are -- I have not gone into it too much yet. Our attitude should be to support and back that sale and handling of Clark Hill power which will add up to the lowest possible power cost to the farmer. If we do that, we will be right regardless of whether that contract involves the sale to Georgia Power, to an individual cooperative, or whatever the case may be.

In all of our actions we must use sound judgment. We do not have a rule on the books that can't and shouldn't be broken if circumstances warrant it. If you use your best judgment in meeting these problems that come up in the field, you will always have the backing of the office in Washington.

SUMMARY OF QUESTIONS AND ANSWERS AT THE CONCLUSION OF MR. STRONG'S ADDRESS:

Mr. Bradley: I think the whole group would be interested in knowing what constitutes commitments on the part of REA insofar as reimbursement is concerned.

Mr. Strong: That is in respect to reimbursement of general funds. REA has in the past made a rather wide-open commitment to all borrowers for reimbursement of general funds expended on work orders, and sometimes not even on work orders. It is a moral obligation on REA to meet proper commitments. There is that commitment there, and it will have to be observed. Where a cooperative in the future is interested in going on its own to the limit of its financial ability, and where that does not endanger its financial condition, then that cooperative should be encouraged to take that course of action.

It may be that if a cooperative has built itself up financially to the point where it can make member extensions out of its own general funds without losing any of its financial strength, then we should help them with that. We are obligated, however, and committed, -- and there has been no change up to the present time in the written policies, -- we are committed to reimburse all work order construction for everything that has been done, and we want to continue to respect those obligations.

We want to assist the cooperatives in setting up their financial houses in such fashion that at sometime in the future they can become entirely independent of REA. We do not want to do that, however, on such a basis as to weaken the cooperative. When they are able to step out from under REA's wing, we want each one to be able to stand as a company that can continue to operate. Part of the reimbursement plan was not put in writing in the past, and it is a little vague. The records show, whether it was written or not, that it was the policy of REA to keep those cooperatives under REA control. Regarding reimbursement of general funds from loan funds for completed construction, we have that commitment which must be observed, whether it is wise or not; but where we can, let's help the cooperatives to break away from any federal domination.

Mr. Nance: I would like to know something about this replacement reserve fund. REA Bulletin 103-2 tells how to set up a cash fund. It does not tell how to establish a level. It goes further to recommend that any additional cash available be put on a cushion of credit. As I follow it, anything over and above the replacement reserve can be used for their own construction, but in the bulletin it says to put it on a cushion of credit. Which should it be?

Mr. Strong: The matter is under discussion at the present time. No firm answer has been arrived at yet or set down. Under the present policies, those in the books, a replacement reserve fund is desirable. We set up a method by which that can be achieved using percentage figures in order to determine the amount of the fund. We recommend first that money be used to pay ahead on their debt to REA. However, they are credited with 2% interest on those advance payments, and they know they can go out and buy government bonds or other securities that pay 3%. We have had about 50 contacts with either managers or boards of directors of cooperatives that say, "we can do either the first, or the second, but we believe we have a moral obligation to establish that cushion of credit." These are not many, possibly only 50 out of 980 borrowers, but it is a good healthy sign. You can't blame people too severely, though, if they go out and buy bonds at 3% instead of paying on a cushion of credit at 2%.

What is the following recommendation in the next paragraph of the bulletin? I think you should read that. It is a further recommendation for the investment of funds. If they do not establish a cushion of credit they should invest their excess funds wisely in accordance with the next paragraph. The same recommendation would apply to anything beyond the replacement fund that is not put into this cushion of credit. There have been some instances recently where borrowers wanted to invest in farm mortgages insured by FHA. They have one bad feature. They are not as liquid as desirable in the case of a cooperative. It may take seven years to get your money out of the things, and that is no kind of an investment for a cooperative that may need its money quickly on short order. The type of investment should be a thoroughly solid form of investment that is highly liquid so that if the need arises, the cooperative can get its money out quickly.

Mr. Nance: If we encourage them to place all the excess money in a cushion of credit they may have to have another loan.

Mr. Strong: They should not be encouraged to place all in a replacement reserve. This is being reexamined to determine what is a really adequate reserve that will protect them. It is a problem in utility accounting. The answers are being worked on right now.

Mr. Corum: Some are trying to use a five year cushion of credit.

Mr. McCombs: In the bulletin there are only two places for cash. One is the R and R, and the other is other corporate purposes. The only thing that says anything about the investments of bonds is in the R and R reserves.

Mr. Strong: To the extent that those surplus funds were put into a cushion of credit, that would offset any additional loan funds granted. The trouble comes in here where many cooperatives that are well to do will set up replacement reserves, skip the cushion of credit, and invest additional funds in other securities. We really don't have any justifiable axe to grind on that point, as all we do is recommend what they do with those funds.

Mr. Nance: If they use their own funds for work order construction, they have a tendency to compromise on the quality of construction which results in a poorer grade of work than when it is financed by REA.

Mr. Scoltock: I have found that there is that tendency, but I don't know to what extent it is carried out. In accordance with the bulletin, as now written, it is REA's recommendation that those funds over and above the R and R reserve should be applied to a cushion of credit rather than other corporate purposes. I understand that it is being reexamined now to see just what should be done.

Mr. Strong: I don't see how we could at this time tell the cooperatives that we could just wipe that off.

Mr. Corum: The majority of managers in my section are trying to get themselves in a good cash position whereby they can carry through anything that might happen.

Mr. McCombs: What would be the policy in regard to retirement of an obligation? A cooperative is paying a certain amount of principal and interest on a note. What would be the policy on retiring the note ahead of schedule?

Mr. Strong: I can't see anything wrong with that. That would be good business sense, and I can see nothing wrong with that. There is another overall angle to that situation. As these cooperatives might be inclined to do that, -- either pay off their indebtedness to the government or build up their cushion of credit, — to that extent they are strengthening the public relations angle of the whole REA program. The REA program, at its maximum, could only serve about 10% to 15% of all the people in the country. We have about 90% of the people who don't care anything about the REA program. So anything we can do to build up REA public relationswise will be all to the good.

Mr. Alford: Regarding ice storms, etc., do we still have the procedure whereby short term loans can be made to take care of emergencies?

Mr. Scoltock: I don't know of anything that has changed our past practice. They always have been studied on an individual basis. However, where borrowers have funds invested at 3% interest, it would seem to me only logical for them to use these first before making a loan for storm damage.

Mr. Strong: We are working to the end where cooperatives can be insured against such storm damage. We are attempting to find the answer to extensive storm damage. I would like to suggest that we want every possible fact relating to storm damage over all the country so that at the end of a year we will have the complete record of what the costs are, how they are handled, what was done, how it was financed, etc. I don't know what the answer would be, but we may come up with something. I hope this can be worked out on a cost basis which would bring the cost of such insurance within the means of the cooperative, and it would afford them a protection they don't have now.

HOW TO PREVENT LOAN SECURITY PROBLEMS — Joseph H. McCombs

How to prevent loan security problems — The only sure way to accomplish this that I know of is not to make any loans — I certainly hope that the Administrator will disapprove this remedial plan.

Every borrower presents a loan security problem until the loan is paid off. There are ways, however, by which the loan security problems can be minimized. To paraphrase Mr. Micawber's advice to David Copperfield, earn one dollar and spend one dollar and ten cents - failure; earn one dollar and ten cents and spend one dollar - success.

I am sure that none of you consider yourselves a financial security problem. Why? Because you simply didn't buy that car you couldn't afford or take that vacation you couldn't pay for or indulge in extravagancies your income would not support. Of course, if any of you make so much money that you can't spend it all that probably is the most pleasant way to avoid becoming a financial security risk.

In order to do this we must first recognize and evaluate the magnitude of the problem and next we must do or cause to be done those things that will improve the borrower's financial position.

The controlling elements are recognized in three variables — the total investment, the investment ratio, and the operating ratio. That is to say: (1) How much money is invested in the business; (2) Are we earning a fair return on our investment and (3) Is the business being operated efficiently?

The surplus which the business is earning can be expressed by the equation — Surplus = (Investment Ratio X Total Investment) (1- Operating Ratio) - (.047 X Total Investment). In every day language this equation says that the profits are equal to the gross revenue minus all expenses minus debt service.

The advantage of considering these relationships as expressed in the equation becomes apparent as you use this formula and become familiar with the relation between the investment and operating ratios. With an excellent investment ratio you can tolerate a poor operation ratio and vice versa. In other words, if you are earning a great deal of money you can indulge in a few extravagancies without jeopardizing your financial position. This will be more fully discussed later on in the conference.

Our subject at the present time, however, is not analysis by ratios, but how to prevent our borrower's financial position from deteriorating.

Let's consider the above discussed elements one at a time. Suppose we start with "Total Investment." Obviously, this should be kept as low as possible, consistent with sound engineering practice. This to a very large extent is dependent upon economical standards and system design. The borrower can further contribute to lowering this investment by employing efficient construction methods. While we must assume that the engineers will do a good job, I am sure they will be receptive to any suggestions or comments which might be made in the interest of more economical standards and design.

Let's find out how much of each kind of material is used per month, plus a small reserve for eventualities. Then let's find out how much of the various kinds of material are stocked in nearby distributors' warehouses and how long it would take to get deliveries from these suppliers. With this information, you will be in a position to determine your advisable turnover. This will produce a saving in the amount of money you will have in idle investment and additional saving in warehouse investment.

This material is in a sense really money in another form. Both materials and money show up on the books of the borrower as assets and should be treated as such. No one would think of throwing a silver dollar at a jack rabbit so why throw a three bolt clamp at one. If you lost a quarter around a pole you certainly would not go off and leave it without trying to find it — why not be just as interested in the borrower's materials and tools. All of these practices and many others have a decided effect on the capital investment.

If there is a sudden increase in the "Cost of Power Sold" the power bills should be examined to ascertain if the increased cost is due to increased demand or increased energy, or both. Increased demand without increased energy probably means that some transit disturbance has caused the demand indicator to register an abnormal condition, which if satisfactorily substantiated, the power company will generally adjust. This condition might be caused by lightning or a high resistance short or ground, or by a large load of very short duration. If the energy has increased sharply but not the demand, meter reading dates should be compared. If it is found that the sudden increase is due to the fact that the power company read its meters late and that you are being billed for say 36 days' consumption instead of a 30-day consumption, there is nothing to worry about as it will be adjusted on subsequent months' readings. Should both the demand and the energy show a sharp unexplainable increase, you should ask the power company for a meter check. It is possible that the meter has been incorrectly read. Also, the metering transformers may be off ratio. Metering transformer connections should be checked. This is particularly true where two element meters are used. By watching this we recently were able to secure a $3,000.00 refund to one of the borrowers for overcharge by the utility.

Percentage line loss is indicative of not only line loss but of the entire unmeasured increment. From a borrower's standpoint, line loss includes line conductor loss, transformer losses, meter losses, stolen current, unmetered current, leakage, loss due to low voltage; in fact, every increment that goes to make up the difference between the substation meter reading and the sum of all the consumer meter readings on the cooperative's system. Obviously, there are many things that a manager can do to decrease his "line loss." Some of these are: see that all consumers are metered; the proper loading of transformers; right-of-way clearance to prevent leakage; maintain proper voltage, etc.

We occasionally advise our borrowers to defer normal maintenance. This is dangerous and should be done only where the situation is thoroughly understood. If a system study indicates that certain sections of a borrower's distribution system are shortly to be rebuilt, then all maintenance should be deferred on those sections except that necessary to protect service and to eliminate hazards. This requires judgment on the part of the manager. Planned deferred maintenance seldom results in a real benefit to the cooperative and should not be resorted to without careful study, rather a planned maintenance program should be put into effect.

Every year poles, transformers, hardware, etc., suffer a loss in service value resulting from wear and tear, decay, accidents, inadequacy, obsolescence, etc. All of such loss in value over and above that portion restored by current maintenance represents depreciation. Likewise, every year the borrower sets up in an account called "Reserve for Depreciation of Electric Plant in Service" a provision for the loss in service value, or depreciation. In setting up this provision, the borrower charges an expense account called "Depreciation" and thus reduces its net earnings or margins for the year by an amount equal to the depreciation charge. This depreciation charge has been equivalent to 3.48% per year of the total cost of the depreciable electric distribution plant. The accumulated reserve or provision for depreciation is shown on line A5 of the monthly operating report.

If the borrower replaces a broken pole or any other item of plant large enough to be considered a retirement unit (unit of property) and charges the cost of such replacement to maintenance expense, it unjustifiably penalizes its operating margins. Since the Reserve for Depreciation of Electric Plant in Service contains a growing provision for the depreciation and eventual retirement of all retirement units of plant, the original cost of any such unit retired, less salvage (if any), should be a charge to the depreciation reserve, with the cost of installing a new unit in its place being capitalized through a charge to the plant account.

By following this procedure the borrower will be conforming to the Uniform System of Accounts and will be charging its expense accounts with only one cost (the cost of accruing the depreciation reserve), instead of charging them with double costs (the cost of accruing the reserve and an improper charge to maintenance expense for substantially the same cost), as is the case when the cost of replacing poles and other retirement units is charged to maintenance.

The foregoing paragraphs relate principally to the treatment of non-cash items, such as the charges accruing the depreciation reserve and charging of the original cost of plant units, when retired, to such reserve. With respect to financing the cost of replacement of property classed as retirement units, REA has recommended (in REA Bulletin 103-2) that each borrower establish in Account 114.2, Renewal and Replacment Fund, a fund to provide the cash necessary for ordinary replacements (as distinct from system improvements) up to an amount equal to the original cost of the property being replaced. The remaining replacement cost generally may be advanced by REA, if funds are available in the budget.

The Renewal and Replacement Fund is to be shown on Line A 11 of the monthly operating report. It merely represents a segregation of cash and investments, normally resulting in a reduction of the amount on line A 8 and possibly line A 13 of the operating report. The establishment and use of the R and R fund has no effect on the amount of the depreciation reserve appearing on line A 5.

The cost of moving or replacing transformers with larger sizes is charged to operations. In an effort to save operation expense, some managers are installing transformers larger than are immediately necessary. This is effective in some instances; however, this can be, and is, over done in a number of cases. When we consider interest and depreciation on the excess investment, together with added transformer losses, it is possible that the borrower is losing money by this practice.

This practice may be analyzed by comparing the total installed distribution transformer capacity with the system peak demand. The installed transformer capacity should be approximately two times the system peak.

Right-of-way trimming is another large item of operating expense that should be watched. Borrowers have the tendency to defer this expense for two or three years and then clean up the whole system in one year. If this work is done on a continuing schedule the expense certainly will be easier to control and will prove more economical. It is less expensive to do light trimming continuously than to wait until the brush has grown heavy and thick and then clean it up at one time.

There are other items of expense which migh well be given serious consideration. Time will not permit my going into these now but maybe at a later date we can explore them to advantage.

The very heart of any business is its revenue. If you do not sell the product you have for sale - and at a profit - you won't stay in business very long regardless of the efficiency of the other phases of your management. The product that you do sell must have a "mark up" over the wholesale cost of the product plus the cost to sell, plus the margin of profit you wish to make on your investment. In the case of our borrowers, the product is electric service (KWH) and the selling price is outlined in the rate schedules. The question of rates is very fully discussed in Bulletin #112-1. It should be borne in mind, however, that no block in

your schedule can be below cost. It may be expedient to have one rate block subsidize another block for a short period but this should be done only after careful consideration. The answer to a borrower's question when it is felt that a revision in rates is advisable is to request a rate study from REA.

A spot check of some of our borrowers operating at a deficit indicated that it would take a 27% reduction in expenses or a 5% increase in revenue to put them in the black. Obviously, while every effort should be made to reduce expenses, no borrower can cut its expenses 27% and give satisfactory service. The only answer is to increase revenue. And the answer of how to keep other borrowers from going into deficit operation is to a great degree -- increased revenue. How are we going to increase revenue? Increased rates is surely not the answer. The answer is increased sales of KWH. A long range program is good - we should have one, but it is later than you think and we need added revenue - now -. We must intensify our sales activity, using every "gimmic" that is practical. I don't know what is the best "gimmic" to use to put load on the lines, there surely are many good ones. Some will work better in one place, some better in another. But by every legitimate means we must strive to sell more KWH. I hope we can change "Power Use" to "Sales Promotion" and think of our activity as selling KWH.

In conclusion, let me say there is no excuse for a borrower's going in the red. There may be reasons, but reasons are not excuses. Astute management will foresee eventualities and make necessary preparations to meet these foreseen and unforeseen circumstances. If a business does not prosper it is because its management was not sufficiently aware of the problems facing the business or did not possess the ability to successfully meet these problems.

SUMMARY OF GROUP DISCUSSION AT CONCLUSION OF MR. MCCOMBS' TALK

Mr. Corum: TVA has fought us setting up that R & R reserve. I don't know if you know about it, or know much about it, but it is so.

Mr. Coon: I have heard of some cases where managers have said certain auditors have advised them to set up a cash fund, but that they did not need to set up a reserve.

Mr. McCombs: It does not have any effect on the capital credits. Depreciation is a book figure, and there is no relation to funded cash reserves.

Mr. Vardy: There are reserves and reserve funds. They are two entirely differenct things. A reserve fund is setting aside hard, cold cash. Setting aside part of your excess and charging it to expenses is reserves. One is hard, cold cash, and one is a book figure. It is the only possible way.

Question: Isn't there some talk of reducing the depreciation from 3.48 downward?

Mr. Strong: There is a study going on now based on actual experience. A depreciation percentage ranging from below 3.48 to above that is under consideration which would be varyingly applied depending on circumstances in that particular area. It is under discussion, and indications are that it will meet the test.

Mr. Nance: Is 3.48 used industry-wide?

Mr. McCombs: No. A committee years ago came up with that figure. They went to the Edison Institute and discussed it with them, and they took reports from 50 utilities that had very good records, and they analyzed these utility reports. After analyzing these the figure came out to 3.48.

Mr. Nance: Is it so flexible that whatever a committee come up with it will be all right?

Mr. McCombs: No, I don't believe that it is so.

"INITIAL STEPS OF A REMEDIAL PROGRAM - PREPARATION OF FORM 811A, CHARTS, TRENDS, DIGEST - F. Allen Vardy

As you know, we have less of the loan security problems in Section II than in any other part of the country.

Inasmuch as we are away behind in our sheduled time, and to permit Mr. Lynch more time for presentation of his portion of the program, I will cut my talk down just as much as possible. We will start by a brief discussion of the initial steps of a remedial program for these borrowers by taking up the preparation of the "Analysis and Projection of System Operations Chart," form 811a. Full instructions are on the reverse side of the sheet explaining the method of securing the necessary figures, percentages and ratios. Therefore, we will not pursue these details at this time. In preparing the form, we compile information for the last three years in the Area Office, thus showing a trend as to how the cooperative is operating, and project the debt service for the next four or five years to the point of maximum debt service. This is based on the assumption that all unadvanced funds will be advanced in full. The other four year projections are to be worked up in the field by the manager and you OFR's. However, since this form is almost self-explanatory, we will go on to charts and trends.

The charts and trends are contained in a graph chart known as the "Goals and Progress Chart." I believe this was designed by Mr. Frank Turney. On this chart in the outside square is a trend which we work on the average monthly basis for the past five years. Four copies of this chart are sent out; one copy for the field man, two copies for the cooperative office, and we ask that the fourth copy be returned to us after the OFR and the manager have projected the chart for the next two years. We think the manager should keep one copy of the chart with him in his desk so he can easily follow along with it, see how the plan is working, and make any necessary changes as the months go by. We recommend that the cooperative's second copy be hung on the wall in the directors' room so that anyone who is interested can see just how it is going. At the present time, we are preparing these charts for those systems who have been or are already what we feel are security risk borrowers, but later on we intend to make them for all the borrowers in our area.

The cooperative digest consists of:

1. A statement giving the historical, agricultural, and financial background.

2. A map showing the area boundries of the cooperative.

3. A statement of statistics showing the development of the system.

4. A comparative analysis statement calling attention to any wide deviation between the state averages and the system figures.

5. A monthly average statistical schedule showing the cooperative's figures for the past three years and the state figures for the last year.

6. The Analysis and Projection of System Operations (form 811a).

7. A Feasibility Study stating the factors of the last study, such as: the miles of line to be built, number of consumers to be served, and the average kwh consumption to be attained. The study goes on to point out where the past has fallen short or exceeded the estimates of the feasibility study.

8. A copy of the Feasibility Study (form AL 51B).

9. Debt Service Requirement Study which shows the present and maximum payments and due dates. Also, the margin per kwh necessary to meet these obligations.

10. The Baling Chart. This will be fully explained later by Mr. Dabney.

All of this information and material which make up the cooperative digest is sent to the OFR for presentation to the cooperative. However, at this point, I'll turn the program over to Mr. Lynch who will tell you what he does when he goes to the cooperative with this information.

PRESENTATION OF ANALYSIS TO THE BORROWER BY THE OPERATIONS FIELD REPRESENTATIVE - Earl M. Lynch

I know that no two people will present the analysis to the borrower in the same way. No two people use the same techniques in talking with the borrower. I have found that I will accomplish more with the borrower, regardless of the problem, if the manager knows he has the time to deal with the problem. I make sure before I go to see him that he knows I am coming, and that he will have the necessary time available.

Sometimes what we have to do with the borrower can be misinterpretted. In this digest which we present to the borrower you will note that there are two copies of everything.

My first approach is to review the digest myself tobecome familiar with this information so I will be able to discuss it with the manager.

My next move is to make contact with the manager for a time when he has nothing on his mind pressing him for attention. We must go at a time when we can get his full attention so as to get our story across to him. Leave the time entirely up to him, and ask him for at least two days of his time. Then I go when he can see me.

After my arrival, my next move is to sit down with him, give him one copy of the digest, and then discuss it from cover to cover, pointing out facts and trends, and pointing out that this is an actual fact as a result of their operations. I point out that the trends are not in the right direction. With regard to the feasibility study included in this digest, I try to impress him with its meaning. After all other documents are reviewed, the

last two reviewed are Form 811a and the Progress and Goals Chart. I review with him just how these are prepared and how to obtain the necessary information.

I always refrain from referring to any critical remarks about his previous performance. I simply endeavor to sell this digest to him. We have to sell him on doing things that will help them and help the business stay financially sound. I try to answer all his questions as we progress through the digest.

Then we come to the final point of the problem of how he is to increase his revenue or decrease his expenses. By that time he has become interested in this enough to know that something must be done. I ask him if he has any plans to remedy the situation. Generally, he will say that he has not had time to think about it, and that he will have to have more time. Now remember, the more the manager will do himself, or you can get him to do himself, the more interest he will have in this. Help him all it is possible, but help him to help himself. As a rule, when he has no plan, I offer my services. It is at this point that you change from the presentation of the analysis to the development of a plan. This is done at the same visit if he wants my help. If he does not, I ask him when the plan is ready to let me come back and review it with him before the plan is released. If I stay on with him to help him develop his plan, generally his first question is, "where do we start?"

DETAILED DEVELOPMENT OF REMEDIAL PROGRAM BY BORROWER AND THE OPERATIONS FIELD REPRESENTATIVE - Earl M. Lynch

Now, during our review of the digest, we make notes of the various steps which we think should get special attention or should be reviewed more thoroughly. However, when the manager begins to ask questions and show a real interest in working out this remedial plan, the first thing I ask to see is his operating budget. In most cases, his operating ratio is out of line. When we review the various items of expense we find that there apparently is no control. Money is being spent without any, or very little, control. In reviewing the budget he has prepared for the year we are able to find out what type of plan he had prepared. You know, you can get many things from the review of the budget. For instance, how well is he using his budget? How does it compare with its actual figures? You will also come up with an operating ratio which he said he would make each month. When you look at the actual figures, you will find he hasn't any control over his budget.

After the budget is reviewed for all these and other items, we go from that and the notes he has made to trying to reduce his expenses. We next look at his organizational structure. We determine the number of key positions in the organization to which he is delegating responsibility and authority to make decisions, etc. If he hasn't an organization chart I ask him to

make a sketch of his present set-up. It won't take so long if he is willing to do something about his situation. We go through the chart to see how well he has control over this organization. He will realize from going over this that he is in trouble. After this general review, we move from this to a break down of the organizational functions. We take a look at the office organizational set-up, the work delegated to employees, the number of activities, etc. We go further by looking into procedure and methods used in the office. We look for ways to reduce expenses. We look for overtime -- how much of an expense is this? Is it excessive? Could it be avoided? When we are finished with the office set-up, we move to the outside which takes into consideration all outside functions such as maintenance, distribution, and operations expenses, etc. We want to find out why so many people are involved in carrying out these functions. Where can it be reduced? For instance, let's pick on right-of-way clearing. How much has to be done? How much has been done already? Find out how much right-of-way he is cutting, and what condition it is in. Do they have a planned program? Are they cutting too much? Could some of it wait, or is some of it unnecessary? (We explain that right-of-way cutting expense can be controlled if he will use a planned program.) Changes should be made at once if they are needed.

The operations and depreciation item of expense should also be reviewed with the manager.

The maintenance of his automobiles, trucks, and such equipment is next to be gone over. How much is he doing that is really necessary? How much just because he thinks it should be done?

Sometimes he is losing by charging units of property improperly and charging it against maintenance. In this way he is taking it out of his pocket twice when it should only be taken out once.

Hunt for every item that can be improved in the operation of his plant. Look for a more efficient way of doing it. Check on new extensions he is building. How many new consumers is he adding per month? How many crews are involved? Then go over the breakdown of expenses between all these. How well is the flexibility in the use of these crews carried out when some portion of the work is late? Can they be used for other things?

The next thing to look into is the inventory of materials. What does it amount to in money? How many items have been laying around for months and months? What is the prudence of purchasing? Who does the buying? Does he buy because it is needed, because he thinks he might need it, or what? Look into this very thoroughly.

Look into his safety program. This will determine how well he is operating and how well he is trying to sustain a well organized, well balanced set-up.

After all this review, we take a look at what we have come up with, and try to depend on the manager to tell us what to do. We want him to take the initiative. What effort is he making to sign up possible consumers close to

the existing lines? Look at the delinquent accounts. What condition are they in? What effort is being made to collect them?

Next, what are we doing to build load? This, of course, will be based on his program to build load. If he has a program, we review it. We must remember to take into consideration the area in which he serves, the type of people he serves, the mixture of agriculture and industry that is involved. What is done depends on the money he has to spend. How can you pay unless you increase the revenue? Does he have a newsletter? Is it a good one? Try to look it over to see what can be done to stimulate load building through this means. What about the appliance dealers in this area? Could they be brought into the plan for load building? Does he have a home economist, an agricultural engineer, an education advisor? Who makes contacts with dealers? All the time that you are reviewing these things with him, notes are being made.

Another thing I talk to him about is his power supply. Is it good, or could it be better? What kind of consumer relations does he have? We must rely on him for this information. Check on his system study. Is it active? Is he doing what is needed as required by it?

Summing this all up we come up with whether or not he is running a business with no controls and no plans. But these are the major items in a review of this type which I go over with the manager. After reviewing and studying all the notes made during the discussion, he may either get his key people together and make out the charts, or he may request me to come back to help him make up his plan, or we may begin on it right away.

Let me say again, I make sure he knows I did not come to criticize him, but that I came to help him. I have learned that nothing can be accomplished with these people unless I go with a spirit of humility so that I get his confidence in me. I don't want to put him in a bad position. You must make him know you want to help him.

There is no cut and dried procedure for presenting this review and digest. Situations, of course, vary. But you must not go as a brass hat from Washington. You have to sell the program, and it is hard for them to change their methods of operation. The manager has to remember that he has to be big enough to sell his product, and it is only by the sale of it that he can really do something about his situation. He can't just make excuses for not selling. But you must have the confidence of the manager in order to accomplish the job that must be done.

After he has filled out the forms and I have reviewed it and made sure it is made up from the best information possible, (and you know, most all the items of expense are controllable), after the plan is completed I tell the manager to keep one copy in his desk where he can go over it from time to time so that he can watch his progress. I suggest he put one copy on the wall so that those interested will have the opportunity to see it. One copy is forwarded to Washington, and I keep a copy.

After the plan has been worked up and put into effect, I go with the manager to a board meeting to try and explain this to the board so that they will understand it better. If we get the story over to them, most of them are willing to go along with it. I present to them just what has happened, and I tell them of the projects that have been established by the manager to remedy the situation. However, we do not go to the board until the manager has a plan. We do not want the board to get suspicious that the thing is about to go on the rocks.

Another thing I am sure you will find, and that is this: The more key people the manager pulls in to help work out the plan, the more they will endeavor to really work on it and put it into operation.

When you go to the board to explain the remedial plan, try to explain what was done to reach certain decisions. Going to the board after the plan has been reached helps to unite the board and the manager.

You see, everything depends on timing. There is a time for everything, and things like this must be presented at the right time for them to accept it.

"MANAGEMENT EVALUATION OF LOAD BUILDING" - Frank V. Turney

Several months ago we were requested to help in developing a method of measuring the effectiveness of a co-op's power use program. We have given the problem a great deal of study and have prepared a measuring procedure that we believe is one way of evaluating the results obtained from the power use program. The evaluation method is not concerned with the "rightness" or "wrongness" of the particular power use program installed by this cooperative. It is strictly confined to measuring the financial results of the present program. Although we believe that this method of evaluation shows some merit, it is not ready for general distribution to all cooperatives yet. It is being used only on a trial basis. After additional study, checking and simplification, we hope to be able to present it for use by any cooperative to evaluate the results of their power use program.

This method not only measures the results of the increased expenditures for power use, but measures the increase obtained by the total power use expense. This same procedure can be used to measure the results of any type power use program. This is demonstrated on chart No. 3 by observing the correlation between power use expense and kwh consumption during 1949, 1950, 1951 and 1952. Basically, our problem is to compare the revenue increase attributed to the program with the cost of the program. The approach to the problem is as shown on chart No. 1. This is an over-simplification of the process we are going to use. If you will note, first we subtract the normal revenue from the actual revenue. The actual revenue will be that shown on the operating report for the month being measured. The normal revenue is the kilowatt-hour value for the same month shown on our projection and in kilowatt hours on chart No. 2. The result of this subtraction leaves us the increase of revenue expressed in kilowatt hours. Now we have to subtract the costs of doing business. First, the cost of power, this leaving the revenue, less power. Then the labor and other miscellaneous costs of the program are subtracted. Whatever is left here is the net revenue in dollars and cents creditable to the power use program.

The first thing we had to do in approaching this problem was to determine what the normal revenue would be over future months. We know what the actual income is each month directly from the operating report. Chart No. 3 is an explanation and a picture of how we arrived at what this normal revenue would be. This is the chart of average kilowatt consumption for farm and nonfarm consumers, drawn opposite a line constituting the total power use expense of the program. First, look only at line A. This is the actual monthly kwh consumption for 1948 through June 1953. The heavy curved line through the center, line C, is the yearly average, or mean consumption line through the history and 1953. This line C is then projected on through 1958; if you will note the figures across the top, they are the yearly averages of this heavy mean, or average consumption line. This chart is drawn in this manner to give a direct comparison between the power use expense by the month, and the actual average kilowatt hour consumption by the month. The history studied was started in 1948. Due to the fact that 1947 and before, the economic condition in the territory possibly was not

conducive to averages, and also being too far in the past for accurate study of figures to use today, so this study is based on the five years, 1948 through 1953.

First, let us compare the power use expense 1948 through June 1950, which is approximately $500 per month, with the kwh consumption through the same period. A study of line D and line E in relation to Line A and C, which is a comparison of peaks and valleys of actual experience to yearly averages of actual experience, reveals an annual increase in kwh consumption of approximately 5 percent per year.

Using the same principle of comparison for the period July 1950 through June 1953, the trend of increase improved to 7.1 percent per year 1950 through 1952, and to 9.3 percent per year 1952 to June 1953, with the power use expense increasing to an average of approximately $1000 per month. This 1953 measurement is taken from the peak of August 1952 to the peak of July 1953. This 1953 July figure is used to measure this increase because this is the last month prior to the start of the stepped-up power use program that prompted this measuring activity. The indications here of a study of lines F, G and H are that the consumption is rising on an increased ratio, even before the stepped-up power use program went into effect. Possibly this is due to an accumulative effect of the power use expense over the past approximately 3½ years. We did not believe it equitable to establish a projection based on this increased rising trend of kwh consumption because of some of the unknown factors of why this July 1953 peak reached 106. After studying the trends for the past five years, it was determined that a more factual increase to use in the projection would be the 8.1 percent, or an average of the 7.1 and 9.3 experienced during 1951, 1952, and 1953. This would take into consideration any abnormalities experienced in arriving at this 106 average for July 1953, and possibly consider any recession periods that might occur in the future. The line B is a projection of monthly kwh consumption. The values of this monthly projection are listed in table form number 2. This table will be used in computing net earnings later on. Using this 8.1, then line B is a projection through five years estimating the actual monthly kwh consumption for farm and nonfarm consumers. This line B is revealing from another angle. Following it on through, we notice that the average for the year 1958 is 128.3 kilowatt hours. The feasibility study for this co-op at the time of the last loan indicated that the average kwh consumption for 1958 should be 154, to establish feasibility. The peak in July 1958 reaches 154, but the average for the year remains at 128.3 or approximately 26 kilowatt hours short. This is a clear indication of the need for a stepped--up power use program to increase the consumption to the point that it will reach or exceed feasibility in the future.

You will note that lines A and B separate at mid-1953 with actual experience being recorded through December 1953 by line A. This actual experience line A shows the added consumption above the projected consumption line B. The distance between line A and B in kwh is the actual results that we are measuring and is the basis of this entire study. We are converting this distance between line A and line B, which is shown in average kilowatt hour consumption into dollars and cents, to balance against the total power use expense, for a net gain or loss of the power use program.

Now that the study is completed and the trend of our available kilowatt hour consumption has been established, we are ready to convert this gain to dollars and cents and compare with the cost of the program. Chart No. 5 is the formula for doing this with an example worked out using November 1953.

Average kwh consumption charts for farm and nonfarm usage covering 1953 and 1954 are the next we will look at. The green bars are a duplicate of the kilowatt hour projection shown as line B on chart No. 3. The average kilowatt hour consumption chart for 1953 has the actual experience increase colored in, in red above the green bars. This distance indicated in red is the difference between the actual kwh consumption and the estimated consumption, which gives us the average kwh consumption creditable to the power use program. The small charts below are the actual net results in dollars and cents of the power use program for this particular co-op. If you will note the example on chart No. 5, the actual computations of arriving at these dollars and cents are shown in detail. First, the actual power use expense is determined by a close scrutiny of the charges made to this account to determine that they are all applicable to power use expense. Then the second phase of the example, the determining of the gross revenue. First the number of kilowatt hours sold is determined by adding the total farm and total nonfarm kwh sold. Next, the number of consumers is determined in the same way by adding the total farm and nonfarm consumers. Step No. 3 divides the total farm and nonfarm kwh sold by the farm and nonfarm consumers billed for an average kwh consumption. Step No. 4 subtracts the normal kwh projection taken from chart No. 2 from this actual average kwh consumption, leaving the increase kwh creditable to the power use activities. In step No. 5 the total farm and nonfarm consumers billed is multiplied by this increase kwh to give us the total kwh increase sold. Step No. 6 determines the revenue per kilowatt sold by dividing the total electric energy revenue by the total number of kilowatt hours sold. Then we multiply the total kwh increase by this revenue per kilowatt to find our total gross dollar value of the increase kwh sold. Step No. 7 determines the cost of power per kilowatt hour sold by dividing the total cost of power by the total number of kilowatt hours sold. Now we subtract this cost of power from the gross revenue, leaving the gross revenue of the program. Now this balance has the total power use expense subtracted, leaving the net figure in dollars and cents that is the net result of the power use program. You will note Chart 4 is displayed but has not been used in these computations. Chart 4 is a revenue-determining process for use in estimating future revenues. This curve is computed for each individual cooperative and is valuable for an accurate estimation when projection of future revenues are being made.

They express the development and use of this method as far as we have progressed with its development. We plan to continue research and study of various co-ops in different categories to eventually develop a package that can be given to field people or cooperatives to use as an accurate method of evaluating the results of their power use program. If there are any questions, I will try to answer them. If there are any suggestions or criticisms, I would like to hear them.

SUMMARY OF GROUP DISCUSSION AT CONCLUSION OF MR. TURNEY'S TALK:

Mr. Strong: Is this particular cooperative in the cotton area? (The answer was yes.) It would seem that it would reflect itself to some degree in the charts you have there. The first big bulge there would to some extent represent their ability to buy at that particular time, I would think. It is quite possible that the buying urge was stimulated by the program at that time when the program just started.

Mr. Bradley: There is also quite a bit of dairying done in that area too, which is a year-round activity, but cotton is their greatest product.

Mr. Strong: We must keep in mind this represents the experience of just one cooperative under a stepped-up power use program in contrast with what might have happened under a normal power use program. There would have to be some means of working this out and relating it to the norm for other cooperatives that might want to use it.

Mr. Turney: I think that with some further study and more cooperatives getting interested in it, we can develop a better package program that can be easily adapted to almost any cooperative.

Mr. Strong: I think this underscores the desirability of developing a program of joint effort between the various segments of industry and the manufacturing end of it, because by combining those we are taking the maximum dollar power and impact that would not be available to any of these alone.

Question: Just what do you mean by a stepped-up program?

Mr. Turney: Well, for instance, this particular cooperative hired its first electrification advisor in 1948. Then they hired a home economist. Now they have many home advisors. So far, by measuring their power use program on this basis it shows quite a total gain. However, we have only measured it financially, not as to whether it is right or wrong. It is strictly analytical and we are making no recommendations on it at this time.

Mr. Colbert: There is an activity being carried on at Alabama 22 in the form of a sales contest. The manager enlisted the help of all the dealers, and $100.00 prize is being given each month to the salesman who sells the most of seven different appliances. It may be that this idea could be used on other cooperatives also.

Mr. Strong: Perhaps you might be interested in the personnel of the power use committee appointed in Chicago by the several groups. To me, it indicates the degree of interest shown and the possibilities that can be worked out. The names of the representatives are:

Electric Equipment Industry:

William Saylor, Nash-Kelvinator
James Cobb, Frigidaire
Joseph Rushton, Frigidaire
H. H. Watson, General Electric
A. H. Hemker, General Electric
R. G. French, Steber Manufacturing Co.

Rural Electric Systems:

Oliver Kimbrough, Farmers Electric Cooperative, Clovis, New Mexico
Virgil Herriott, Sioux Valley Empire Electric Association, Colman, S. D.
William Crisp, Tarheel Electric Membership Association, Raleigh, N. C.
J. K. Smith, Kentucky Rural Electric Cooperative, Louisville, Kentucky
Harry Oswald, Arkansas State Electric Cooperative, Inc., Little Rock, Ark.
Harvey Schermerhorn, Wisconsin Electric Cooperative, Iola, Wisconsin

Commercial Power Companies:

E. C. Easter, Vice President, Alabama Power Co., Birmingham
R. W. McClure, Vice President, Kansas Power & Light Co., Lawrence
J. A. Busch, Vice President, Northern States Power Company of Minneapolis

REA:

Wade Edmunds, Chief, Northern Region, REA
William Callaway, Chief, Southern Region, REA
Andrew McLay, Information Services Division, REA
Richard A. Dell, Head, Electric Farming Staff, REA

A temporary steering committee was selected also, and its members are: William Saylor, Oliver Kimbrough, J. K. Smith, R. W. McClure, and Joseph A. Busch. I am to serve as chairman of the committee in a non-voting capacity; and Russell Gingles, NEMA, also a non-voting member, will act as secretary.

The steering committee's first meeting will be in May, at which time the thoughts, ideas, recommendations, etc., that we have been able to come up with in the meantime will be gone over and discussed. It will involve thoughts, ideas and recommendations from the represented organizations regarding advertising, direct contact, dealer contact, joint participation campaigns, and the like. It is the aim of this group to bring into play as soon as possible a complete nation-wide power use, or sales promotion, campaign. We believe that among the manufacturers we will have at our disposal the combined experience and ability of some of the biggest advertising and promotion agencies in the nation.

Mr. Coon: It seems we have given over-emphasis to appliances rather than getting power on the farm to increase the use out on the farm.

Mr. Turney: I think that is because, at the present time, more power is used in the home than outside.

Mr. Bradley: I heard a discussion on this. They said the rural market has been neglected because of lack of dealers, and lack of service to the appliance after it has been sold.

Mr. Strong: That was one of the items discussed at Chicago by the manufacturing people in their separate group meetings. The consensus was that cost-cutting farm equipment, economically operated, had as important a part to play as did the appliances. As the cost reduction appliances go into operation, people will buy more of the house appliances. We are trying to get the people who have a stake in the labor saving electrical devices on the farm itself to become more interested in this.

The Section V history has not been too encouraging. Many cooperatives did not carry through with it when they got the money. A Section V loan, when properly made and utilized, is the best loan REA can make. It helps to protect the security of the Section IV loans already made. We are putting a general limit of $50,000 on any one Section V loan. If it is hard to get, they will want it more, and try to get it. Section V money can be of tremendous help to cooperatives and to us. There is no inclination on our part to hold back on the use of that money, but we would like to see the cooperatives make a reasonable effort to get this type of money in their own area. If they can get it out there, well and good; let them get it. But if they can't get it, and in most instances they can't due to high interest rates, we won't have any objections to the loan if they are really going to use it. They can come back as often as they want if they will use it. However, they must justify their need for it. If they can show they really need more than $50,000, we can be sure they will get it.

SUMMARY OF DISCUSSION ON POWER USE AND MEMBER EDUCATION -- Clifton J. Bradley

The cooperative was likened to a farmer with four fields. In the case of the cooperative, the first field is the engineering and construction; the second is operations and maintenance of the physical plant; the third, collections, accounting, budgeting, personnel, etc.; and the fourth field, that of member education and power use or load building. The fourth field is the one that has been neglected and is the one that must be cultivated by cooperatives in order that they may be strong.

It was brought out in the discussion that much of the difficulties in this field go back to the early program in which REA urged borrowers' employment of electrification advisers. At that time the emphasis was placed on employing the worker and not on getting the job done. In many instances young agricultural engineers and/or home economists were employed as electrification advisors and they had only the haziest idea what their responsibilities were or how to tackle them. Likewise, the cooperatives' managers were not qualified to give the necessary direction to the work. As a result, many so-called power use programs of individual cooperatives were non-productive and were dropped by the boards of directors.

The immediate need is for an aggressive sales promotion approach to the power use program.

1953 Over 1952 Percentage Increase of KWH

Average Per Member		Total	
Georgia	12.5	South Carolina	60.3
Alabama	12.0	Kentucky	20.5
Kentucky	11.2	Florida	20.5
Mississippi	8.6	Georgia	18.2
Tennessee	7.6	Mississippi	16.2
South Carolina	6.7	Alabama	13.3
Florida	6.7	Tennessee	13.1

ENGINEERING SURVEY OF LOAN SECURITY BORROWERS - Geo. H. Cole

As a preface, he stated that in order to accomplish our responsibilities to the fullest extent, we should exercise good salesmanship, and that we should not expect many immediate sales since it will take selling, buying, persistence and patience to reap good results.

Mr. Cole reviewed briefly the two types of engineering surveys of loan security borrowers:

A. Brief General Inspection Survey: It was explained that the field engineer would be responsible for making a brief general inspection of each borrower's system as outlined in Staff Instruction 161-1R1. The preparation of a schedule for making the Periodic Surveys was a matter for the field engineer to develop. If the field engineer determines through the brief inspection that the system is in a condition which will require more thorough inspection, the matter should be discussed with the manager relative to making a special comprehensive inspection and detailed survey.

B. Special Comprehensive Inspection and Detailed Appraisal: The OFR will be notified of a borrower selected in accordance with REA Staff Instruction 161-1R1 that has problems which may endanger the security of the REA loan as well as the proper operation of the system and he will be responsible for discussing the matter with the manager and, if necessary, with the board of directors. The OFR may call on the field engineer for assistance.

The area office at the same time will notify the field engineer relative to the system being considered a security risk borrower and he will be responsible for conducting a special comprehensive inspection and detailed appraisal in accordance with Staff Instruction 161-1R1. The field engineer may call on the OFR for assistance. The field engineer shall not proceed with the survey prior to the OFR's discussion of the matter with the board.

It was requested that the OFR and the field engineer endeavor to develop a schedule showing:

1. Total dollar amount of maintenance necessary.
2. Total time required for all maintenance work.
3. Specific work for each year and its dollar value.

Mr. Cole stressed the fact that we should not let the borrowers know that they are classified as problem type borrowers.

FIELD ENGINEERS' RESPONSIBILITY WITH LOAN SECURITY BORROWERS - BRIEF GENERAL INSPECTION - James B. Davis

In the problem of putting over the TO&M surveys, salesmanship is really involved. I understand that the reports we make after the general surveys are made are sometimes used by the OFR in their later work with the borrower. I would like to discuss what we do in making the report.

This is a general survey, and the scheduling of a general survey is done by the field engineer. In the Southeast Area we have been furnished with a list of borrowers arranged in accordance with the DSER. The theory is that we are to start with the ones with the lowest percentage of DSER, and proceed to the highest percentage. Occasionally, however, we get a request from someone in between, and we put forth a special effort to take care of this as soon as possible.

In arranging for a survey, we try to contact the manager personally and set up a satisfactory time for it. Regardlessof the approach used, we ask the borrower to furnish certain information such as the following: an up-to-date map of the system showing the location of the lines, sectionalizing points, substations, etc. We would like the map marked off in areas by age groups. It is pretty hard to get this at times. If there are any old lines, we would like to know about it. We ask for a summary of outage hours per consumer per year, but generally, we don't have much luck on this. Most borrowers have outage records, but not by consumer. Most borrowers that I have made surveys for say that this summary is a waste of time as they don't use it. I have tried very hard to sell the idea of developing the outage record on a consumer basis as in this way the record would prove very helpful. I ask the borrower to supply voltage charts taken at the substation and at the end of the line. In this way you get a pretty fair picture of the voltage conditions throughout the system. I also ask for a brief summary of their operations and maintenance records for the past two years and what they plan to do in the next two years. Most borrowers have been very cooperative.

As far as the inspection of the physical plant is concerned, I try to spend two, three or four days in inspection of the outside plant, and I try to get the manager to go along with me. In every case where the manager has gone with me, he has said it was very well worth while, but it is not always possible to get the manager to go. If you can't, try to get the engineer or the operating superintendent to go. While looking the lines over from a general viewpoint, I suggest to the operating superintendent or the engineer that they may want to make notes on things they see or things we talk of that need to be taken care of in the immediate future. It is really surprising the amount of notes they come back with.

After going over the physical plant we review with the manager and/or the engineer the operating records of the cooperative. This is where we find one of our greatest weaknesses. The borrowers just don't have the kind of operating records that are required to do a good job.

I would like to also mention the reception we are getting from the managers. I made a survey not long ago at a cooperative, and when I went there the manager was rather lukewarm. But after the survey was made he really got interested in it. He asked, based on the percentage of miles of road on the system, what would be the condition of the overall system. We came up with a figure of overall maintenance of things that should be done. I suggested he and his superintendent figure the cost out as to what it would cost to take care of the things that were wrong. After finding out the cost, they started making plans as to how they could go about it most economically. He requested that I come back in about nine months' to a year's time to help him evaluate the corrections and what they had done. I don't think there will be any more trouble with this particular manager.

However, I made another survey after that, then went with the OFR to review it with the manager. The manager agreed with everything we brought to his attention. He stated he would take immediate action to start procedures to correct the things we had found, and would start operating reports we requested he install. I was over there about two weeks ago and found everything just like it was when I left. Nothing had been done. This just shows the types of reception we get.

Now I would like to summarize some of the responsibilities of the field engineers pertaining to general TO&M surveys:

1. To assist the borrower in determining the physical condition of the system and the quality of service being received by its members. -- To advise REA of this.

2. To assist the borrower in formulating definite <u>plans</u> and <u>work programs</u> (not just detailed cost estimates) to put the system in good physical condition.

3. To review with the borrower its operating practices and procedures, and to recommend changes and/or additions that will lead to more efficient operations, thus avoiding financial difficulties arising from improper construction, operations, and maintenance.

4. To recommend establishing of operating records that will enable management to appraise conditions existing on the system, and that will indicate when and where corrective action should be taken.

The above action by field engineers <u>should</u> tend to keep some of the borrowers from becoming problem borrowers.

SUMMARY OF GROUP DISCUSSION AT CONCLUSION OF MR. DAVIS' TALK

Mr. Lynch: In the first example you pointed out regarding the manager's attitude and the money involved, do you take a look at the operating budget he prepares to see how much money he is spending already, and if he can afford to spend it?

Mr. Davis: I cover all that in my report

According to Staff Instruction 161-1R1, the field engineers' report shall include estimates of the annual costs for the next two years of operations, maintenance, replacements and improvement of service:

1. That would place all items on REA Form 300 in "Good" or better than "Good" condition.
2. That are planned for actual accomplishment on a scheduled basis.

At this point Mr. McCombs told how his office was able to use a general survey in helping out a problem borrower in his Section. He said he thought the field people would like to know that the Washington people do follow through on these reports.

Mr. Davis: It is my understanding that the OFR doesn't participate at all in making the general survey. If the general survey reveals that there is a real problem, we go into a comprehensive survey, and the OFR is brought into that. In the past on a general survey, I have only given its details to the board when requested to do so by the manager. Some request this, and some do not.

Mr. Cole: The general survey is required on all systems on a periodic basis to let REA know the existing condition of the borrower. We can't follow a definite time schedule in making these surveys, but we will try to make them in accordance with their listing in the DSER. The problem type borrowers come first, and then the others follow.

Mr. Lynch: Over what period of time would it be?

Mr. Scoltock: That will depend on many circumstances. However, our goal is to complete a general inspection of each borrower's system about every two years.

Mr. Cole: Relative to the comprehensive survey. There is nothing in Staff Instruction 161-1R1 that tells who should go to the borrower and inform it that such a survey has to be made. I think the OFR and the field engineer should work together on this as they have done so nicely in the past, but I believe the procedure should be clarified.

After considerable discussion of this matter it was determined that the instructions clarifying the procedure would be sent to the field as soon as possible.

SPECIAL COMPREHENSIVE INSPECTION & DETAILED APPRAISAL - James H. Phillips
(Condensed Summary of Discussion)

A comprehensive inspection and detailed appraisal is made of each borrower that has problems which may endanger the security of the REA loan as well as the successful operation of the system, as set forth in Staff Instruction 100-1R1.

In view of the fact that the report of the field engineer is used by the operations field representatives in working with the borrower towards an acceptable plan of action for overcoming its problems, it is imperative that there be close cooperation between the OFR and the Field Engineer. The Field Engineer should not commence the inspection and appraisal until after the digest and other initial data has been presented to the borrower by the OFR.

The field engineer's report is prepared in accordance with REA Form 718 and is divided into three parts:

Part 1. Office and shop information;
Part 2. An evaluation of the condition of the physical plant after field inspection by the field engineer;
Part 3. The summary of plans for correcting unsatisfactory conditions.

This summary is to be developed by the field engineer and the borrower. The summary is in the form of estimated costs of operations, maintenance and replacements divided into the following three categories:

1. Annual routine costs for the next ten years.
2. Expenditures not made heretofore because of borrower's financial condition, but now considered necessary to correct some critical conditions.
3. Total deferrable costs.

"FOLLOW-UP ACTION BY OFR." AND SUMMARY OF DISCUSSION - Odea Evans

The follow-up action refers generally to the OFR, but I think the engineer should be included in this also. Not necessarily on each visit, but periodically. I usually try to get back to the cooperative after the first month. I give the manager 30 days to get started. On this visit I get the statistics from the operating reports, etc., as this shows whether or not he is really reducing costs. If he is making progress, I give him whatever assistance he needs, but I don't bother him too much. Then you may be able to skip a month or two, but go back the third month at least. Go over his plans and see what he has done on each particular item. Whatever you do, don't make the manager feel he is being picked on. Go down the list of all the items listed, and each visit after, do the same thing and check on the same items. If after the third month good progress has been made, meet with the board and show them what progress has been made. If you find the estimates of the original plan are incorrect, correct them, and make adjustments as they become necessary.

When the follow-up is to end depends entirely on the progress the manager has made. The operating reports may show many cuts, but don't slacken off. It may be just temporary. Don't slacken off on the follow-up until you know for sure that the borrower is in - or getting in - a good financial condition.

Another thing, it is a good idea to try to get a copy of the manager's plan as to how he is going to carry out the remedial plan he worked out.

Mr. McCombs: It would help to get the same plan sent in over the signature of the manager. Your plans have been very good that you have helped work out, but it would be better to have the manager's signature on them.

Mr. Evans: It probably would be even better to get the president of the board to sign. We should make the board know they have problems, and this would be one way of doing it.

Mr. McCombs: Before we can make a loan we have to have a resolution that the board has adopted the remedial plan. The president's signature would help.

Mr. Evans: I thought the list Mr. Cole sent out was an excellent idea. The ones who were on the list felt like a bomb shell hit them when I showed them they were on it. It helped tremendously to let them know they really had to begin to do something, and soon. I had ten borrowers in Kentucky on the list, and the fellows I talked to about it were willing to do something about it.

Now, going back to the power use department, we are trying one thing right now in my area, and that is giving free light bulbs to the consumers. They generally are 100 or 150 watt bulbs. One manufacturer is putting out one

bulb just called a kitchen bulb. Another calls one a pig lamp, and there is a chicken lamp, etc. The people who can't remember what watt to use can look at the picture and get the right kind.

We have a promotional plan going on in Kentucky. In that plan they are trying to sell water systems to the farmers. They are trying to go out with a packaged job and make it available to the rural people. The plumbers got together with the cooperatives and they sat down and worked out unit costs on a packaged job to put in the home. It is creating quite a bit of interest down there, and you can have many different variations. The plumbers said they have averaged at least 20 systems per year in the last three years. One cooperative has over 13,000 members, and only a very small percentage have water in their homes, actually less than 1 percent.

Mr. McCombs: I would like to comment on two things. That particular manager applied for a $300,000 Section A loan. This manager came into Washington and discussed his need for Section 5 funds to carry on an effective plumbing program. He was assured that the loan could be made if the need is properly substantiated.

Also, we took up with the Legal Section again the matter of money to dig wells, and we still cannot finance money for this. We can finance the pipe, but not the digging of the well. I thought this might be a guide in regard to Section 5 loans for plumbing.

Mr. Evans: We have two or three borrowers with Section 5 loans, but $50,000 is not much of a loan for the programs they have, even though it helps. A number of the managers got together with the Statewide organization to see about low cost financing through the Statewide. It has not gone very far yet, but it is a possibility. If they can't get it from REA, they will try to get the money in other ways.

Mr. McCombs: These Section 5 loans are still limited to $50,000 except when special consideration can be given and the facts substantiated that more is definitely needed.

Mr. Scoltock: I am glad Section 5 was brought up again. That was one of the main points made in Chicago last week. I think every manufacturer there stated that the cooperatives had a gimmic that no one else had, and that was Section 5 loans. It is the best tool anyone ever had for load building. I think from this meeting in Chicago we all realize the importance of Section 5 loans more than we did before. As was explained at the Power Use Conference in Chicago, if the cooperatives have a definite need that can be supported, they will not be limited to $50,000 loans.

Mr. Nance: Don't you think those borrowers not making 100 percent of debt service should be required to send in copies of their minutes?

Mr. McCombs: At one time we were having a great deal of trouble with the cooperatives getting them to send in various information we needed. They just wouldn't notify us. They used to say it was in the minutes, and it had been sent in. It got complicated, and instead of sending in a letter or memo on the things, they would say they sent it in in the minutes. The best way to keep out of trouble was to discontinue the sending in of the minutes. Then the cooperatives could not say they had notified us. We are better off getting them to send in special letters and memoranda.

Mr. Lynch: Someone ought to see the minutes. We fieldmen can't always see these things, and a copy should go to Washington so someone sees them. Two months ago the manager of a cooperative called me. They had had a board meeting, passed a resolution, and wanted much more than they could afford. I think someone should go into these things and look them over. We need them to know what the cooperatives are doing.

Mr. Nance: If you get them to write up the minutes like they should be, they will get in the habit of doing it correctly. We should have the minutes from the borrowers on the DSER list to keep a check on them.

Mr. McCombs: Many come in that have hardly a thing in them. We can't go back and ask them to elaborate. Besides, it would be a burden on us in Washington to get in the minutes from these cooperatives and have to go over them.

Mr. Lynch: What would be your attitude in Washington to us getting a copy from the cooperatives who are not making debt service, have them send the OFR a copy.

Mr. Scoltock: Well, you heard Joe's reason why we don't have them send us a copy now. If they have the excuse that they sent an REA person a copy of the minutes and there was something in them that we should have known about right away, and you hadn't had a chance to go over them, or were out on a field trip, it might be too late to help. Perhaps, though, it might help to get an expression of opinion if the group feels strongly enough on this to establish some new procedure on this.

Mr. Vardy: We don't have enough people in the office to take on anything new. We couldn't handle the review of the minutes safely with the personnel we have in the office.

Mr. Scoltock: With the close follow-up we are expecting from the OFRs concentrating on the loan security borrowers, this being the first priority, that would be the logical approach, and it would serve much more than sending in minutes to REA for review.

Mr. Vardy: The field men have the authority to go in and examine the minutes, and if they are not clear and concise, they can ask for clarification.

Mr. Lynch: We can't be at every board meeting. Where there is a security risk we should have a copy of their minutes. If we can have these minutes we would know what went on and be able to check on them a little in this way.

Mr. Vardy: I have no objection to the field men getting the minutes if they want them, but don't send them to Washington. (Mr. McCombs agreed with this.)

Mr. Evans: The way it is with me, I have to call on these borrowers anyway, and I would see the minutes at that time. I would not get too much benefit from receiving a copy of the minutes from the board meetings. I don't think I would need them.

Mr. Scoltock: Well, I don't see anything wrong with the field people getting the minutes if they want them and if it would help them in their work.

Mr. McCombs: I would recommend that for administrative approval first, and I think we should recommend it if the group wants it. I wonder, though, if Blackburn would approve it, as it would have to be cleared with him.

Mr. Harrell: I wouldn't mind asking the cooperatives I was interested in to send me a copy of their minutes if I thought it was necessary. I would put it in my report to REA that I had requested it.

Mr. Black: If there is a legal reason for not having them, I don't want them.

Mr. Scoltock: I will find out from Blackie, and we will drop this for now.

NEW LOANS PROCEDURE, LONG FORM -- AND SUMMARY OF DISCUSSION --

Charles B. DeLancey

Mr. DeLancey: Going back to Section 5 loans, the present procedure on processing these loans has not changed. We still require for the recommendation the usual board resolution and any supporting data along with the letter from the cooperative. There has been no change in this. Also, there is one other form that belongs in this 20-2 bulletin. It was left out when it was duplicated.

Mr. Evans: We have been referring to problem borrowers. What is the policy on these borrowers getting Section 5 loans?

Mr. DeLancey: None at all.

Mr. Scoltock: It would probably be a very good thing. It might be one of the corrective measures they could take in order to increase their kwh consumption, thereby increasing their revenue.

Mr. DeLancey: There has never been any restrictions on these loans as far as debt service is concerned.

This manual we brought with us contains some new steps. One copy of Staff Instruction 20-7 was passed out yesterday. Let me deal with the index of 20-2 right now. No. 1 under this index deals with the internal procedure in REA. This staff instruction is still a draft and is not approved as yet, but it sets forth a new look with reference to general requirements for processing the loans from the field. This will be required by the Area Office, and we will discuss this later. Staff Instruction 1-1 outlines the relationship and the responsibility of the Areas and Staff Divisions in regard to loans to power type borrowers. REA Bulletin 61 is the Administrative policy on G&T loans. No. 5 on processing Form 70-F will be discussed later also. No. 6 is a revenue estimate table. This was put in for your convenience and a look at the new method of determining estimated revenue without the use of slippage for farm and non-farm users. No. 7 is just the method for getting information from the field with reference to irrigation. No. 8 has been sadly neglected by REA, but the form should be used. No. 9 in this folder is a pamphlet prepared by Mr. Callaway on the use of the services of field representatives and others.

Lets discuss Staff Instruction 20-2. This sets forth the requirements and information necessary to prepare a complete loan application. We have stressed the importance of advanced planning. If a borrower anticipates the need of a loan, say in 12 months, steps should be taken now to get the necessary information and prepare the studies that will be needed as a basis of the loan application. The more planning you can get the borrower to do, the more efficiently we can get the application processed. The most important step is an up-to-date system study, and kwh estimates approved by REA. If an up-to-date system study is not available, we should at least have the engineer give us a recent voltage regulation study. As instructed in this bulletin,

the procedure is a little different from what we have been doing. The borrower submits a minimum request on two copies of Form 740-A. This is merely a list of amounts required showing the items. I think this is very clear. The borrower does not have to list all, only those that apply. Along with this request, two copies of a resolution by the board should be submitted. On the back of this Form 740-A the instructions are given as to how to complete it, and it is very simple. If the borrower wishes, they can send in a complete application.

The next form, 740-B, you will note, is formerly the old AL-29-R in part. However, more detail is required as to the consumer classification. First, show the rate schedule used for billing, members, number of consumers on this application, total existing service - both active and idle. Next, the analysis of the present idle service, indicating the number to be retired, the number not to be retired, and the average number to become revenue producers. This would be the number of idle services at the present time. In the preceding column giving the number of active and number of idle services, you should note that this is supposed to be a yearly average. Column I, "Consumers to be Connected With Existing Funds," I think an analysis should be made of that column. You should sit down with the manager and determine the funds available in the budget, the funds earmarked for this, etc. We are holding up one loan now because the borrower won't ask for money that is encumbered. The work orders have been approved, etc., but he won't request the money.

Mr. Lynch: Whose responsibility is it to sit down with the manager?

Mr. DeLancey: I think the OFR should be the one, and then the field engineer should also do it if he might be going in to check on work orders, etc.

Mr. Lynch: This puts us in a very bad spot. We are placed in the hands of the consulting engineers. They go in to the manager, and they want to prepare everything. And then, the first think you know, the loan application is off to Washington and we never see it. It goes in to Washington all wrong, then we have to go back and try to straighten it out. REA has to quit recognizing the consulting engineer in these cases. You should straighten this out with the managers so that the field man checks the application before it goes in to Washington.

Mr. DeLancey: You are right. We should impress it upon the borrower that the application should be checked with the field man first. It is not too clear in this bulletin.

After we get this form 740-A, we must have 740-B. Then we go to 740-C. When the borrower prepares this form, he is going to need some help on it. This details the cost estimates on the application by purpose. This can be used in REA as REA's estimates. It details every phase of cost that has been known to be put in a packet. These forms in most cases are set up for the signature of the borrower's president.

Mr. Lynch: Will these forms be placed promiscuously in the hands of the consulting engineers?

Mr. DeLancey: I don't know if I have the answer to that, but a complete set of forms will be attached to the bulletin when it goes to the cooperative.

Mr. Lynch: If the engineer keeps a supply of them it isn't going to help much. He ought to have to go to the borrower for this form and work with the borrower on his part in getting this form prepared. I don't think the Government should send all these consulting engineers a supply of these forms.

Mr. DeLancey: I don't think it is in this bulletin, but I think it should be stated in the forms that they should be checked with the OFR before sending in to Washington.

Mr. Scoltock: I think in one way we will be better off if the engineer does have the form. This is the first thing the engineers have to put their names on. Everything on 740-C is just about exactly the information the Area Engineering Office has worked up in the past and they have had to do it all themselves. Then they have given it to the loans people. This form is almost exactly that information which previously was worked up here. This means instead of just giving us a lump sum figure, the cooperative now will have to submit this information themselves, and the only person who can work this up is the cooperative engineer. He will have to do that. They will have to break it down into individual items, and it should be much more accurate.

I agree that it would be desirable to have some means of assuring ourselves that these are checked in the field. It should be done, but I am not sure how it can be accomplished.

Mr. Lynch: The pressure these consulting engineers put on these borrowers is something. They try to rush it through without discussing it with the OFR. For instance, I heard first about the short loan form from a consulting engineer. We need your cooperation to tie things down so they will go through channels rather than going straight to Washington, and then having to come back to us to get them straightened out. I think Washington should cooperate with the field people to get things to go through channels. Then things should be more nearly right when they come into Washington. There is not enough consultation between the field and Washington. By the way, I had not even seen 20-7 before this meeting which explains the short form.

Mr. DeLancey: 740-C is signed by the president, the manager, and the borrower's engineer. It is also used by REA's engineer in the office as a completed form and goes into the loan docket. It may vary some from the borrower's estimate, but it will be the final recommendation to the Administrator.

Form 740-D is purely consumer data on large power loads, both existing and potential, and by that I mean six months to a year's time. This is to be completed and sent along with the other information.

740-E, the next form in 20-2, is a summary of the irrigation loads, and I don't think that needs any explanation.

The next form which most of you know about, 740-F, is the old AL-82-R. This has not changed from the previous form, and the processing is the same. This must be presented to both committees, the House and the Senate, prior to the working of the loan.

We have gotten down to the power type borrower, but we will skip that now and let Mr. Dabney get on with his explanation of the short form. REA decides whether a loan will be processed on a short or long form.

Mr. Nance: It seems that on 740-A, these numbers are tied to financial requirements. Wouldn't that make it easier?

Mr. DeLancey: We tried it several years ago and it did not work. You mean with reference to the account numbers shown?

Mr. Nance: I mean item 1, then item 13.

Mr. Scoltock: There will be a change in the budget items.

Mr. McCarthy: It has been approved that the budget items will be reduced to 8 or 9 items. The expenditure reports will be discontinued. I think at present we will continue on with the present method until this draft is approved.

Mr. DeLancey: I think at present this form is all right as you are just notifying REA that you need a certain amount of money and what it is for. This would not tie in with the new form C either. You will notice that form is also signed by the president.

Mr. Phillips: Regarding 740-B, you mentioned we would be familiar with the work order situation and could estimate the number of consumers to be connected with existing funds. This is not so. Unless we are called in to analyze what they are doing, we will have nothing to do with it. Their own consulting engineer will do it. We will never see it unless we are specifically called in.

Mr. DeLancey: Let's go back to Mr. Callaway's general statement that the field people will generally furnish advice and check on the loan application when it is being made up by the cooperative.

Mr. Lynch: Well, it works a hardship on the field people as the borrowers just don't consult with us first. If it was compulsory that the loan application had to come to us for review first before sending it to Washington, then we would have some control over it. As long as it operates as it is now, we can't do a thing about it.

Mr. DeLancey: I think the checks on the applications have been done both ways, both before and after being sent to Washington. We will take it up with Mr. Callaway and Mr. Scoltock and see what can be worked out.

Mr. Scoltock: I think the ideal situation would be to have the loan application checked in the field first, but just how far we can carry that through and insist that this be done, I don't know. It has always been a problem. It has always been the written procedure that they should be checked in the field before sending them in to Washington, but we all know the cooperatives bring things in and by-pass the field completely. I think these should be checked in the field as much as possible though and we will try to devise a means where as much as possible they will be reviewed in the field first. We will do everything we can to encourage the borrowers to have them reviewed first in the field. Most of you know, of course, when applications are being prepared. We never before had a complete procedure such as this, though, that shows exactly what will be required. I think it will be easier now.

Mr. Black: Suppose such an application comes to Washington, and it is okay. You would go ahead and process it. But if it is not right, send it back to the OFR and then they will go to the cooperative and get the correct information for processing. I think this works pretty well. We have done this in the past.

Mr. DeLancey: The borrower will get this new bulletin and it will contain the new forms. I assume you will be questioned considerably by them about it.

I want to bring up a couple of other things. There is no change in the sale or purchase of property procedure. The bulletins covering these are still in effect. There is no change in 140-2 on kwh estimates and power requirement studies. These are all still in effect.

NEW LOAN PROCEDURE - SHORT FORM - Eugene V. Dabney

Regarding the problem Mr. Lynch brought up, we recently had a field report from Mr. Nance saying he had discussed the loan program with a manager, and he said the borrower wouldn't need any money for quite some time. Within the next few days we received an application from this manager. We just sent the whole thing back to Mr. Nance, and he found out about the loan application in that way. We have sent a few others back, but we have always sent them back to the OFRs. I think there is merit in having all applications sent to Washington through the OFR, if it is at all possible.

Now, regarding the short form, this is mostly an internal procedure and does not affect the field very much. Actually, the procedure provides for certain criteria to be met by the borrower in their operating and financial conditions. If they are on a high level we can short circuit the long form and not make the detailed studies based on estimates, etc., that are necessary for the long form. The criteria is based on the actual operations of the cooperative. It is a pretty sound way to determine the feasibility and advisability of the loan.

We can go through this. On page 2 of Staff Instruction 20-7, it sets forth the minumum requirements to be met. Of course, we don't know anything about this until after the application is received. And it makes no difference as to the type of application sent in as it must be the same kind and contain the same information regardless of what form we use to process it. The first requirement is that the DSER must have been at least 100% for the last three calendar years. The next regards the amount of the loan request which requires that the loan not amount to more than 20% of the total loans advanced, or $500,000, with one exception, that if for some reason we feel there is a justification to use the form, we can write a memorandum to the Assistant Administrator stating why we think it should be used - providing it is not more than 30% of the total advances or $700,000. If he approves, we can use the short form. Another criteria which must be observed is that no more than one loan using the short form can be made in any 12 month period. Also, the borrower must have a positive net worth. Also, the existing electric system of the borrower must have been adequately operated and maintained. We get this information from the engineer. If it is not available we can't use the short form as we can't certify to it. Another thing we must do is to determine that the good financial and operating condition of the cooperative will continue in the future as it has in the past.

Until we receive the application, we can't determine what form will be used, so the application must come in in the regular manner. This may not have any direct bearing on the field activities, but it might indirectly in one way, such as if we get a number of borrowers in this classification and use the short form for them, it will expedite the loan, and others will want to know how to get in that category. The whole thing points to the recognition of the efficiency of the operations and the level of the financial condition of these borrowers. The more borrowers we have like that, the better we can handle the loan program in the office.

SUMMARY OF GROUP DISCUSSION AT CONCLUSION OF MR. DABNEY'S TALK

Mr. Lynch: In the last few months we have had a good many applications on file up there. Now suppose someone gets his application all prepared and takes it to Washington. He wants approval right away. You have some on file already, and now this man comes along with pressure. Now, does he get his loan moved up ahead of these others already on file?

Mr. Dabney: It depends on the source and degree of pressure, but it is frowned on in Washington. However, we have no control over some of these.

Mr. Scoltock: I do not feel that Gene wants you to think that a large percentage are done this way. Sometimes it depends on the nature of the loan, how badly it is needed, and the purpose of the loan.

Mr. Lynch: I know of one who did not need the loan. The DSER was about 135 or 140, but he got the money.

Mr. Dabney: We try to follow the schedule as closely as possible, but things do come up from time to time. The fact that a cooperative has a high DSER does not necessarily mean that he does not need the money, as they may have a big program in progress that it is needed for.

Mr. Scoltock: If it would help you people in the field, we could send out a typed schedule of loans. It is just about the same thing as the production control sheet which you already get, but if you would like that we could send it to you.

(The field people decided they want both the production control sheet and a typed schedule of loans, and it was agreed to send them both.)

Mr. Scoltock: There is another thing you might not recognize. Although we have a loan schedule, there is another schedule that governs what we can do with loans, and that is the kwh schedule. Quite frequently we can put through one loan ahead of another because we can get the kwh much sooner for one than we can for another application. Some may still require further studies to be submitted whereas others may already be in. But the number of loans really rushed through because of pressure are really very, very few.

Are there any other questions regarding loan techniques?

Mr. Lynch: I think it is good -- glad to see that new set-up coming out.

Mr. Scoltock: I think it is a step forward in the right direction. So far in the history of REA we never before have had as complete a list of instructions as we have here.

POWER-TYPE LOANS - Charles B. DeLancey

Going back to the packet again, you have a copy of Administrative Bulletin No. 61 which was issued quite a while ago, but it still is in effect. It contains the provisions for making loans to power-type borrowers, and these will be made only under the following conditions: (a) where no adequate and dependable source of power is available in the area to meet the borrower's needs, or, (b) where the rates offered by existing power sources would result in a higher cost of power to the borrowers than the cost from facilities financed by REA. In addition to the application for a loan from the power-type borrower, of which two signed copies should be submitted, we still need two signed and certified copies of the board resolution, and an original and three signed copies of Form 740-F, the notification to Congress. A pre-loan engineering study should also be made, and along with the study, a power requirement study should be made by the Power Requirements Section. This does not necessarily require a field appraisal. This applies to transmission also.

We covered some of this already this morning, and there isn't much else on this that we have to offer now. Most of it is for internal use, other than the pre-loan engineering.

That is about all I have on generation and transmission as there is no change in that.

SUMMARY OF GROUP DISCUSSION AT CONCLUSION OF MR. DELANCEY'S TALK

Mr. McCombs: There is one thing I believe we could have help on from the OFR, the field engineers, and the auditors, etc. We don't want to make any bad loans. We want only to make loans that are feasible and where there is a good basis for it. If the fellows in the field could suggest and watch things for us, it would help considerably.

Trends differ on different cooperatives, and we have to be careful. It would be advantageous to us if you come across any information to let us know about it. Some cooperatives don't have many kilowatt hours to go before they hit allocation. Some have many more hours to go, but let us know any unusual things. When the difference between the purchased power cost and generation and transmission is very small, it makes it very hard to make a loan for generation.

Another thing is getting a criteria for making the loan. We want a real justification for making that new loan. It might be due to many different things. It may be new consumers; it may be increased load due to power use. Also, if they have been giving poor service over the past few months and need additional generation to heavy up the lines, then let us have the

record of the service during the past few months on these distribution cooperatives, and we can base loans on this. Anything you can give us on these subsequent G & T loans would help. The first G & T loan is not so hard, but the ones to follow are really very hard to justify.

The whole criteria comes back to this service deal. Bad service is excellent criteria, and it will strengthen the loan packet considerably. Don't let the manager think it is a black eye on the cooperative. An excellent justification for a loan would be poor service, because the objective of the cooperative is good, dependable, low cost service. Get in the reason and justification for the loan that will strengthen the loan packets.

SECTION V LOANS - Eugene V. Dabney

I had thought I would read the paragraph in the Act that pertains to Section V loans, but I know you all have read the Act, and it has already been discussed by Mr. Strong. I thought we would discuss the application for a Section V loan, which really is very simple compared to applications for Section IV loans discussed by Mr. DeLancey. We just need a certified copy of the board's resolution requesting the loan and a letter from the borrower. In the resolution, the amount should be stated, and the amount should be broken down into the various uses which the cooperative expects to make of the money. Also, the resolution should indicate the approximate number of consumers the borrower expects to serve by this loan. In addition to that, the borrowers are supposed to appoint a credit committee to go over the applications from the members for Section V loans, and the resolution should set forth the members of the credit committee. A rough draft of a Staff Instruction is being made up which will provide for the establishment of the credit committee. Committees can change, and they should be listed in each application. It should be an active committee.

One other thing, with the resolution there should be a letter setting forth the reasons why they need the money. It can be one of two things, and possibly both. The first is that they need the money to help them prepare to pay off the Section IV loan, or else adequate credit to members is not available in the area.

Any actual facts that might help support the loan recommendation to the Administrator should be included. A number of studies could be made: for instance, to determine the approximate amount of equipment to be provided; kwh studies for that equipment; how it would contribute to the financial condition of the cooperative; sufficient information to indicate that adequate local credit is not available, etc.

Regarding the copy of an actual application in the back of your folders, this is what I had in mind to support the studies needed for submission of such a loan. A study like this one would help a lot to show the financial condition of a cooperative with a Section IV loan.

Another thing would be to furnish us with any information regarding the cooperative's sales promotion program to prove to us that they are really going to use this money.

The fact they can't get adequate financing locally should be stressed very strongly, if this happens to be the case. The statement must go into the docket that commercial credit is not available locally.

I read a copy of a memorandum from Mr. Nelsen to Mr. Zook recently regarding these Section V loans, and he stated that the use of local credit should be encouraged. In turn, Mr. Zook wrote to Mr. Callaway and Mr. Edmunds regarding Section V loan applications in process. He returned some and said it seemed to him that the Section V loans for certain cooperatives did not indicate the real need for the money, or that if local credit was or was not available, it did not say so.

SUMMARY OF GROUP DISCUSSION AT CONCLUSION OF MR. DABNEY'S TALK

Mr. DeLancey: I would like to state that all three sample packets included in this folder are actual loan recommendations, and two of them are for the Southeast Area. This new procedure is supposed to go into effect on April 1st.

Mr. Scoltock: In connection with these Section V loans and the memorandum written by Mr. Zook, I don't want you to get the impression that it is going to be very, very difficult for cooperatives that really need them to get Section V loans. Mr. Strong told the group in Chicago that any cooperative that had a real need for these loans and could show they were using them to advantage would be encouraged to use them.

Gwyn Price, head of the North Carolina State Authority, had a letter from one of the larger banks in North Carolina, and the president of the bank was encouraging the financing through the cooperatives of the Section V loans. He pointed out that it was the best thing for the local communities. It brought more money into the community, thereby benefiting the communities, and it benefited the banks and the people, the dealers included. He was actually encouraging the use of Section V loans.

Mr. Lynch: I would like to know what percentage of the total loan application is set up for legal fees.

Mr. DeLancey: It is based on the mileage covered by the loan. It varies in different States, but it is according to a formula set up by the legal division.

Mr. Dabney: The amount of money put in the budget is not put there for the attorney. It is to be used by the cooperative to pay whatever the attorney's fees may amount to, but the attorney should not necessarily know the amount of money allocated for this purpose.

Mr. Lynch: I agree with you completely. They should not know how much has been set aside for this, but it gets out, and they think the entire sum is meant for them.

Mr. McCarthy: In the telephone program they have even had the legal fee set up so that it is not immediately available to the attorney.

Mr. Evans and Mr. Nance: I think the attorneys should furnish the cooperatives a bill for services rendered just as they would anyone else. Then if the bill is too high you can tell them so. If it is not, you can pay them from the money allocated for this.

Mr. Scoltock: We are trying to get across to the cooperatives that the fee should be based only on the services performed, and not just because a certain amount is set up in the budget should the cooperative feel they have to pay that amount. The attorneys do not get a copy of the budget, only a copy of the letter of transmittal, so they should not know what has been set aside for this purpose.

I am afraid there was an impression left before recess that we are subject to pressure in making loans. Actually, we have so few cases of that that it is really no problem. I don't imagine we have more than just one or two a year.

Just because a schedule is set up it does not mean that a loan will maintain a certain position in the schedule all the way through. Possibly an application that comes in a little later on may go through before the one that came in first, and this is especially so when we can use the short form. It may be that we are perhaps waiting for information from the cooperative, and that delays a loan. We are always working on the one that we have all the information on, and that is the reason the schedule is flexible.

CHANGES IN UNIFORM SYSTEM OF ACCOUNTS -- George T. Gilleland

There are approximately 50 revisions to the Uniform System of Accounts. Many of these are only minor changes in the title and text of accounts. There are a number of major changes, however, affecting the records of borrowers, which were made necessary on account of the new loan policy and the growing independence of the borrower, such as the new concept of a retirement unit, service life of electric plant, etc., which affect the margin of earnings.

1. Retirement and Property Units

The retirement unit and the property unit, which were formally considered the same as a construction unit or bidding unit, have been redefined in practically the same terms. The retirement unit is now defined as: A plant unit which when retired, with or without replacement, is accounted for by removing its cost from the plant account. In other words, it is an item of plant which is not replaced through charges to maintenance accounts; and a unit of property is defined as: those items of electric plant which when retired, with or without replacements, are accounted for by crediting the cost thereof to the electric plant account from which they were removed.

2. Replacement and System Improvement

A. Replacements

While on the subject of replacements it might be well to see how replacements are financed. According to Administrative Bulletin 64, Loans for Replacements of Borrowers' Property and System Improvements, issued May 31, 1950, loans will not be made for the purpose of replacing units of property with like units made necessary because of normal depreciation and wearing out of facilities. The costs thereof should be charged to maintenance and financed through the Renewal and Replacement fund. If, however, the replacement units are different from the units being retired or exceeds the cost of the units retired, REA will finance the excess.

B. System Improvements

Loans may also be made to cover cash requirements for system improvements. Cash requirements include the cost of removal as well as labor, material and other construction costs to replace the units of property removal. System improvement is defined as any changes or addition in electric plant facilities which will improve the quality or quantity of electric service.

3. Account 120.6, Transfer of Cash, has been added to take care of inter-fund transactions.

4. Account 242.1, Consumers' Energy Prepayments, should be used only for recording prepayments of energy bills and not small over-payments of bills or credits arising from adjustments to energy bills.

5. Interest on Installation Loans

Previously, interest on REA installation loans was charged against operating income. As of January 1, 1954, this interest will be reflected against non-operating revenue by a charge to account 530.2.

6. Retirement of General Plant Items

For record purposes, general plant items such as land, structures and improvements should be retired through Account 144, Retirement Work in Progress.

7. Gains and Losses on General Property

Gains and Losses resulting from retirements or sales of general plant items other than land, structures and improvements will no longer be reflected in Account 273.3, Gains and Losses, but in Account 250.6, Reserves for Depreciation of General Plant.

When an operating unit or system, land or other physical property included in Account 110 is sold, the gain or loss should be reflected in Account 273.3.

8. Oil circuit reclosers and sectionalizers will no longer be carried in Account 131.1, Material and Supplies, until installed but will be capitalized in Account 355, Overhead Conductors and Devices when purchased.

9. Controlling and Distributing Costs

A sub-division of Account 100.3, Construction Work in Progress, is recommended for controlling all costs in connection with these equipment items during the time necessary to purchase, identify, test and prepare them for actual use by the system. It is further recommended that each borrower study its costs of setting meters, transformers, oil circuit reclosers and sectionalizers and determine (at least annually) a standard average cost of installation of the various items. The journal entry to record these installation costs is a charge to Account 100.3 with a concurrent credit to Account 242.2, Miscellaneous Deferred Debits. That portion of the credit in Account 242.2 relating to transformers, OCR's and sectionalizers is to be transferred to Account 761, Operations of Lines. When such items are installed on the line, and the portion of the credit in Account 242.2 relating to meters is to be transferred to Account 762, Service on Consumers' Premises, when installed on the system.

10. Primary Insulators

Primary insulators have been reclassified from Account 354 to 355 for record and retirement purposes and to conform to the FPC system of accounts.

11. Audit of Capital Credits

We no longer require an audit of Patronage Capital prior to the allocation thereof.

12. New Revenue Classification

New Accounts 601.3 and 602.3 have been provided to record revenue derived from irrigation pumping and schools and churches, respectively.

REA BULLETIN 183-1, DEPRECIATION RATES AND PROCEDURES -- George T. Gilleland

This bulletin is issued by REA to aid borrowers in their accounting for depreciation and to set forth a range of recommended rates by primary accounts for their transmission, distribution and general plant facilities.

1. Definition of Depreciation

Depreciation is defined as "the loss in service value of depreciable plant not restored by current maintenance resulting from causes against which no insurance is carried, such as wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.

2. Straight-Line Method of Computing Depreciation

This method is the writing off of the net cost (less salvage value) of an item over its service life in equal annual amounts. The method has wide acceptance among electric utilities and American industries generally.

3. Range of Rates

Inasmuch as the plant investment of each borrower differs and operations vary according to geographical locations, climate, operating and maintenance practices, load conditions, etc., each borrower is to select a rate for each of the primary accounts within the recommended range which in its judgment would be the most suitable in measuring expiration of the service life of its depreciable plant on a straight line basis.

4. Selection of Appropriate Rate

It is recommended that borrowers whose systems are operated under ordinary conditions select a rate for each account which is near the middle of the range. Systems operating under extreme conditions should select a rate near the top or bottom of the range, as appropriate.

5. New Rates

The rates recommended herein are effective January 1, 1954, and are not retroactive.

6. Group Method of Depreciation Accounting

The group method used in computing depreciation differs from the unit depreciation method in that a number of units of property are grouped for depreciation accounting purposes. The units may be grouped by primary accounts or by functions, the essential requirement being that the property included in each group have

some homogeneity. When a unit of plant is retired under this method its costs, less salvage, are charged to the depreciation reserve account, and no recognition is given to the so-called gain or loss until the items included in the particular group are abandoned. Group depreciation accounting is used almost universally in electric and other utility industry and is now required by REA.

7. Calculation of Composite Rate

The procedure for determining the composite rate for a functional group is as follows: (1) multiply the balance in the respective primary accounts in the group by the individual rates selected for the various accounts; (2) the total of the products obtained by this multiplication is then divided by the total of the various primary accounts in the group to get a composite rate.

8. Production Plant

Borrowers should establish their own depreciation rates for production facilities and recommend these rates to REA for approval. The recommendation should include rates for primary accounts as well as a composite rate.

9. Separate Decimal Sub-Accounts

The REA Uniform System of Accounts provides separate decimal sub-accounts for the various functional groups of electric plant, such as production, transmission and distribution and calls for a single composite depreciation rate for each. With respect to general plant, the system of accounts provides a further sub-division, for record purposes only, of Reserves for Depreciation. It is recommended that borrowers establish four separate depreciation rates and break down the reserve for general plant in four ways as follows: (1) structures and improvements; (2) transportation equipment; (3) communication equipment; and (4) all other general plant. All other general plant includes accounts 372 through 379, exclusive of accounts 373 and 378. A range of rates from which borrowers should select the rate for each primary account in each functional group is given in the table on pages 5 and 6 of REA Bulletin 183-1. Rates should be reviewed periodically, that is, at least every 5 years and altered, if necessary, to reflect changes in service life and salvage estimates.

SUMMARY OF GROUP DISCUSSION AT THE CONCLUSION OF MR. GILLELAND'S TALK ON DEPRECIATION RATES AND PROCEDURES

Mr. McCombs: The proper handling of this will certainly have an effect on the DSER. This is a thing that should be understood.

Mr. Davis: What about a depreciation rate on special equipment such as a tractor?

Mr. Gilleland: It would probably be up to the manager to select a rate on it and notify REA, asking for approval. It is not listed; and for anything that is not listed, it would be wise to write in and get REA approval.

Mr. Lynch: Do you have any idea when this will be ready for release, officially?

Mr. Gilleland: I think there will be a meeting on it the latter part of April or the first of May.

Mr. Lynch: This is the season in this area when all the managers and directors are having their meetings. Should it be discussed with them now?

Mr. Scoltock: No, don't discuss it until it is officially approved.

Mr. Blass: Is there any overall average expectancy worked out on this?

Mr. Gilleland: I think so. It might be higher in some areas, and lower in others. These ranges have been established from the records of a number of utilities over a long period of time.

Mr. Blass: A lot of cooperatives that are under 100% now as to the debt service ratio might apply the lower rate and be over 100% on the debt service ratio.

Mr. Gilleland: We are looking for all of them to select the lower rate.

Mr. Colbert: Isn't there the possibility of a great deal of manipulation on this, possibly by someone who is real smart?

Mr. Gilleland: There is that possibility.

Mr. McCarthy: If you just manipulate one depreciation rate it would not change the composite rate appreciably.

Mr. Nance: They will go through this and take the lower rate, undoubtedly.

Mr. Alford: Will the depreciation rate procedure and the new work order procedure affect the TVA borrowers?

Mr. Gilleland: I assume this applies to their work, too, as they are REA borrowers. It may have been cleared with TVA.

Mr. Scoltock and Mr. McCarthy: I don't think it has been cleared with TVA. I haven't heard it discussed, but TVA accounting will probably continue in the TVA area.

RETIREMENT UNITS OF PROPERTY -- Leo A. McCarthy

Prior to 1954, the construction unit and the retirement unit were identical. Now they are quite different. The construction unit is to be retained and used for bidding purposes as well as staking instructions to the field personnel. The retirement unit, which is another name for a unit of property, essentially provides a definition of maintenance, or divides replacement costs between capital items and expense.

We started out to reduce the number of retirement units. Since the beginning of REA there have been approximately 790 standard construction drawings. Up until the present time, REA cooperatives have been using the basic construction units for establishing retirement units and record units. The construction unit represents both materials and equipment used and the method of assembly

In re-establishing the depreciation rates to conform to those of the electric industry, it was decided that the retirement unit should conform more closely to those used by that industry so that the charge to the depreciation reserve would be proper.

It was noticed during the review that all the construction assemblies were similar to an erector set; that is, each assembly contained major elements and minor elements. The major elements were considered retirement units while the minor elements were classed as minor units of property. For example, the A1, B1, and C1, each contain a pole, the necessary bolts and braces, insulators, insulator pins, and neutral brackets. Both the B1 and C1 have similar cross arms. If we continue through the construction drawings, we find other constant repetition of the basic elements of construction. These were just assembled in different manners to form the various structures. Each assembly represented a construction assembly or unit and, on the basis of the old bookkeeping method, the old retirement unit. Therefore, the property records of the cooperative are quite large with many entries that are essentially duplicated both as to cost and to materials used.

The reviewing committee was able to resolve approximately 790 drawings to less than 50 retirement units. This was done by making a retirement unit small enough to represent a certain minimum investment and allowing minor items of property, such as bolts, braces, insulator pins and associated hardware, to be averaged in with the cost of the retirement units.

The Manual of Accounts defines a retirement unit as: A plant unit which, when retired, is accounted for by removing its cost from the plant account. (In the case of depreciable units, such cost is charged to depreciation reserve.)

The Manual of Accounts defines a record unit as: The minimum division of electric plant for which a continuous historical record is maintained underlying the detailed electric plant accounts. Plant unit records are very similar to records maintained for materials and supplies in that a perpetual inventory in quantities and amounts shown on each record is reconciled periodically with the balance in related plant accounts.

REA Bulletin 181-2 defines a record unit as a unit designed for accounting convenience and to facilitate record-keeping of plant costs on a practical basis. It is never smaller than a retirement unit but is sometimes a grouping of the retirement units for purposes of convenience. For example, it is suggested that all poles be divided into three classes - 35 and under, 35 to 45, and over 45. Cross arms are to be grouped into two groups - 10' and under, and over 10'.

SUMMARY OF GROUP DISCUSSION AT THE CONCLUSION OF MR. McCARTHY's TALK ON RETIREMENT UNITS OF PROPERTY.

Mr. Nance: If you retire that cross arm, you have to take the insulator off. You put it back up on the other cross arm, right?

Mr. McCarthy: That's right. If it is broken it is charged as maintenance.

Mr. Lynch: Will all these units which we have known before be changed to conform to the new work order manual?

Mr. McCarthy: Yes.

Mr. Nance: Will it do anything to the plant's records?

Mr. McCarthy: It will adjust the cooperative's records to the present day "going concern value."

Mr. Lynch: Some of the borrowers have heard about this coming. They are already complaining about what it will cost in money to change from the old to the new construction manual. They say they can't afford to spend that kind of money.

Mr. McCarthy: We know that, but it will not affect the negotiation of their contracts; it will affect their inventory records. The work will come in getting the first breakdown of what they already have. It will take work in order to get this set up in the records. I am trying to point out now just a definition of what the retirement unit is.

Mr. Lynch: I don't think there is any question about the retirement units themselves. I think the questions will be on the cost involved. That's where we'll get our resistance.

Mr. McCarthy: It will have to be completed over a period of time. They can start with present day construction and set it up, and all future construction will be under the new set-up. Then they can go back and take the staking sheets of prior construction and convert to the new property records.

Mr. Scoltock: There is no doubt that it will meet resistance. Any change meets resistance, but once it is established the convenience and savings of the new method will more than off-set the cost of converting it.

Mr. Colbert: Are group meetings contemplated with the cooperatives?

Mr. McCarthy: We think there will have to be meetings of that sort.

Mr. Lynch: I can't see how we can get the story over without group meetings. We will have to tell them what is involved and sell the program to them.

Mr. Nance: When can we hold these meetings? Do you have any idea?

Mr. Scoltock: Not yet. I'd say when you have the final draft in your hands.

Mr. Nance: How long a time do you think we will have to have in a group meeting on this?

Mr. McCarthy: They gave us ten hours training on this, and there are still points upon which I am uncertain. I would say that it should be at least a two-day affair. The confusing thing about this is that the three things, retirement units of property, converting construction units to retirement units, and continuing property records, are all so closely related that you can hardly separate them. Work orders are tied in in the same way.

Mr. Lynch: I feel sure there will be quite a great deal of opposition. They are accustomed to the way we have been doing, and they won't want to change.

Mr. McCombs: I think this is in line with the FPC system of accounts, and our people seem to feel we should go along with the FPC system of accounts and not TVA.

Mr. Lynch: Why didn't they adopt the uniform system of accounts of the Federal Power Commission? Why does REA have to be different?

Mr. Scoltock: The people in NRECA have been interested in this too, not only REA. It has been needed for a number of years. This is a means to simplify it to the point where it can be used by all the cooperatives.

Mr. Colbert: Who would you have in mind to represent REA in this group meeting?

Mr. McCarthy: The OFR, an engineer, and an accountant. There will have to be someone trained to explain it. If you feel you can do it yourself, it would not be necessary for anyone else to be there. Some of these things will turn up results that we aren't expecting right now.

Mr. Blass: As I see it, the cooperatives that have continuing property records will not have too much trouble. It will be more difficult to set up new records if their present records aren't accurate.

Mr. Scoltock: On the continuing property records, these will be converted to the retirement units which George Cole will talk about. The construction units will be the same.

WORK ORDER PROCEDURE - Geo. H. Cole and Leo A. McCarthy

A. History and Plan of Revised Work Order Manual

1. Reason for the Manual and Objectives Obtained

The old manual was developed in 1945 for systems contracting for the greater portion of their construction and, for this reason, having very few outside workers directly employed. Under this plan force account construction was not extensive and most work orders were completed within a short period of time. Today many of our borrowers have large force account crews and do much of their own construction. This has increased the volume of material and labor transactions to the point where any work order system must include effective accounting controls in order to assure accurate cost records. By summarizing the three basic costs, that is, materials, labor and overhead, individually before any attempt is made to summarize by work orders, it is possible to verify the accuracy of the accounting for each of these basic costs.

In May 1950 the financing policy concerning replacements was materially changed, that is: (1) a new classification of system improvements was established and it became the policy to finance the total net cost of these changes; and (2) the excess cost of ordinary replacements over the original cost of the property replaced also became subject to financing by REA. These loan policy changes made the old work order manual obsolete. Attempts have been made since 1950 to accommodate this new financing but the methods employed by the various operating offices have not been uniform. Under the new manual formulas have been developed for financing purposes and work orders have been classified by types of construction. By summarizing construction and retirement work orders on one inventory we believe a uniform method of calculating the amount subject to financing by REA is established.

In 1953 we developed new retirement units and associated record units to be used for depreciation accounting and to establish continuing property records. These new units are quite different from the construction assemblies previously used for record purposes and costing in the work order manual. Appendix I has been prepared to aid in the conversion of construction units to new record units and provision has been made in the new manual to use record units for both construction and retirement work orders.

Since 1945 numerous bulletins and memoranda have been issued by REA which, in effect, superseded procedures set forth in the old work order manual. The new manual incorporates all applicable new procedures adopted since 1945 and is in accordance with the present policies.

Because of the increased amount of force account construction, the new manual recommends the use of blanket work orders. This method of recording common type jobs in a continuing type work order should eliminate many of the small work orders formerly prepared by borrowers.

2. Plan of the Revised Manual

The new manual contains four parts, plus an appendix. Part I relates to basic cost records made up of: (1) materials; (2) labor; and (3) overheads. The manual calls for these three basic costs to be completely summarized and balanced out before postings are made to work orders and the various general ledger control accounts.

Part II relates to work orders. This includes estimate, construction and retirement work orders. A separate section relates to blanket type work orders and their use by a borrower. The final form in this part is called "Inventory of Work Orders." Here the costs summarized on construction and retirement work orders are brought together and correlated in such a manner that the amount subject to financing by REA may be calculated. This is the only form in the manual which is basically designed for financing purposes and is the only form which is to be submitted to REA in connection with the advance of loan funds.

Part III relates to the unitization and classification of work order costs by record units and primary plant accounts. This part has to do with gross construction costs only, as retirements are completely accounted for in the previous part relating to work orders. The forms shown in this part are: (1) Staking Sheet; (2) Conversion Table; (3) Tabulation of Record Units; (4) Standard Costs; and (5) Unitization and Distribution to Plant Accounts. The object of this part is to take the total cost of construction work orders completed in a given month and to relate these costs to various record units. By grouping the various record units the amount to be transferred to each primary plant account is arrived at. In order to make this unitization, the following procedure is recommended: (1) construction units shown on the staking sheet are converted to record units; (2) the record units are summarized; and (3) standard costs are applied to the various record units and a trial cost or "bogey" developed. The actual cost of the work orders is then compared with the total trial or standard cost to produce a ratio. The costs developed on the basis of standard costs are then adjusted to actual costs by application of this ratio.

Part IV relates to the special accounting for meters, transformers, OCR's and sectionalizers. This special accounting has been developed to implement the provision of the system of accounts under which the costs of these equipment items are capitalized on purchase and retired only when abandoned, with the cost of setting

these items (except for the initial setting) being an operating expense. The items in this group are not controlled through the materials accounting; therefore, the costs of these equipment items have not been included as part of the construction and retirement work orders.

In other words, the first three parts of the manual relate to force account construction and are further restricted to only those materials which are controlled through the Materials and Supplies control account in the general ledger. Part IV relates only to these 4 equipment items. As a part of the special accounting for meters, transformers, OCR's and sectionalizers, the work order manual also proposes a method of estimating the first installation costs of these items and sets forth a plan to capitalize these costs at the time the items are purchased, with all costs of setting such items being charged to operations when they are actually energized on the system.

The front side of the form devised for this special accounting relates to purchase of new items, while the reverse side relates to the conversion of 1½ KVA transformers to higher ratings. The reason this latter group is included in this special accounting is that it has been determined that the recoring of a 1½ KVA inadequate transformer to one of higher rating is equivalent to the abandonment of an old transformer and the purchase of a new transformer.

B. Basic Changes in Forms

1. Eliminations

a. Separate inventory of retirement work orders. Inventory of construction and retirement work orders now combined on same form and shows relation of retirements to any specific construction.

b. Analysis of Original Cost of Property Retired, old sample No. 6. Now done by one simple calculation on face of retirement work order new sample No. 15. This procedure also eliminates, inventory of assemblies removed from plant, previously on the reverse side of inventory of retirement work orders, old sample No. 3. Also eliminates analysis of replaced units, previously on reverse side of individual work order cost sheet, old sample No. 8.

2. Additions

a. Summary of Material Salvage Tickets, sample No. 6. This has been added to simplify proving calculations and reconciling errors that may occur in posting. The use of a separately identified salvage ticket is provided to minimize errors in accumulating costs and preparation of retirement work orders.

b. Use of Monthly Labor Cost Summary, sample No. 10. Shown as new form in work order procedure, but most borrowers now use similar form in ledgers. Use of this procedure saves borrower making duplicate posting of individual employees time to each work order form.

c. Overhead and Distribution to Work Orders, sample No. 12. This form has been offered as a practical means for calculating overhead chargeable to construction and retirement work orders, and provides a centralized record of overhead distribution.

d. Unitization and Distribution to Plant Accounts, sample No. 20. Eliminates the calculations that were previously required on the reverse side of Inventory of Work Orders, before inventories could be submitted to REA for advance of funds. The new form is designed to conform to the new record or retirement units. The calculations to unitize and distribute to plant accounts has been greatly simplified. No breakdown of labor and material costs is used.

e. Summary of Special Equipment Costs, sample No. 21. Meter, transformer, oil circuit recloser and sectionalizer costs are now capitalized at time of purchase. The initial capitalization includes installation, handling and all incidental labor costs prior to initial installation. All initial costs in connection with new equipment or converted transformers are summarized on this form, and provides the basis for journal entries to the plant accounts. It also provides the basis for request of advance of loan funds.

No accounting is made for these equipment costs in the work order procedure.

3. Revisions and Consolidations

a. Material Register, sample No. 7. Replaces Material Summary and Distribution to Accounts, old sample No. 10. Also space has been added for showing distribution of material costs to construction work orders and salvage values to retirement work orders. Posting of each material charge and credit ticket to the individual work order cost sheet has been eliminated.

b. Daily Work Report, sample No. 8. Revised to provide travel records for 3 trucks instead of one.

c. Employee Monthly Time Summary, sample No. 9. Replaces Employee Semi-Monthly Time Summary, old sample No. 15. Summary for entire month, saves borrower hundreds of calculations, extension and postings to accounts and work orders.

This form has been designed to simplify calculation of overtime. Charges to accounts and work orders have been simplified by the use of a monthly average hourly rate instead of separate rates for regular and overtime hours.

d. Construction Work Order, sample No. 14. Revised to show only monthly totals for material, labor, overhead and special services. Individual posting of material charge and credit tickets, and individual labor costs has been eliminated. Summary of advances and accounting for meters and transformers and O.C.B.'s has been eliminated. Summary of replacements has been eliminated. Space has been provided to show whether the work order is for new construction, system improvements or replacement. Space has also been provided to show the number of the related retirement work order whenever there are retirements in connection with the construction.

e. Retirement Work Order, sample No. 15. Revised to show calculation of original cost, only total monthly labor, overhead in connection with removal, and total salvage value of material returned to stock.

Posting of individual salvage tickets and individual labor costs has been eliminated. Distribution to accounts has been provided for, eliminating the old form sample No. 6, Analysis of Original Costs Retired, and the inventory of assemblies removed from plant. Space has been provided to classify the retirement, and to show the related construction work order.

f. Inventory of Work Orders, sample No. 16. Revised to show construction and retirement work orders on one form. Related construction and retirement work orders are shown on the same line with additions or deductions indicated in accordance with existing loan policies. Breakdown of material and labor costs has been eliminated. Accounting for transformers and meters has been eliminated. Unitization of costs and distribution to plant accounts that previously was required on the reverse side has been eliminated. Completion of this form to submit to REA for advance of funds has been greatly simplified. Space 15 provided for the engineer's certification in accordance with REA Bulletin 41-3.

g. Staking Sheet, sample No. 17. Face of the staking sheet is the same as used in original procedures. The reverse side has been designed to provide for converting construction assemblies to record units of property in connection with construction and retirements.

i. Inventory of Record Units, sample No. 18. This form replaces the tabulation of Staking Sheets old sample No. 7. It contains all the record units included in work orders of any specific inventory of work orders.

j. Standard Record Unit Cost Sheet, sample No. 19. Replaces the Standard Assembly Cost Card old sample No. 5. Eliminates need for separate card for each unit or assembly. The standard costs are used in unitizing construction costs and distribution to plant accounts on sample No. 20.

C. Basic Changes in Procedure

1. Material Section.

a. Movement of meters, transformers, oil circuit reclosers and sectionalizers not recorded on material charge or credit tickets, since this equipment is capitalized at time of purchase and should not be confused with material handling. Movement to be recorded through individual historic record cards.

b. Salvage from retirements to be shown on separately identified salvage tickets and summarized monthly on separate summary of material salvage tickets.

c. Material Charge, credit and salvage tickets are posted to materials register, showing distribution to accounts and indicating to which work order charged. This procedure eliminates the previous requirement of posting each ticket to the work order cost sheet.

2. Labor Section

a. Hours reported on daily work report to be total hours worked without indication as to overtime hours.

b. Each employee's time as shown by daily work reports, to be summarized and distributed to accounts and work orders, once monthly instead of twice monthly as shown by previous procedure. Distribution of labor charges to accounts and work orders based on total monthly hours work at an average monthly hourly rate instead of using separate calculations for regular and overtime hours. Many calculations and extensions are saved by the suggested procedure.

c. The distribution of all individual employees labor costs are posted to the monthly labor cost summary instead of the individual work order cost sheets.

3. Overhead Section

Monthly overhead and distribution to work orders is computed on a separate record form, to accelerate proving of totals with total distribution before posting to work order cost sheets.

4. Work Order Section

a. Posting of material, labor and overhead costs to individual work order costs sheets has been reduced to 3 monthly postings. One total for material from Materials register. One total for labor from monthly labor cost summary. One total for overhead from the overhead and distribution to work orders.

b. In connection with retirement work orders the type and quantity of record units retired is posted directly from the reverse side of the staking sheet. The distribution of retirement costs to plant accounts is accomplished on the face of the retirement work order. One set of standard record unit costs are used for original costs for all retirements, instead of attempting to locate the actual original cost of the specific unit retired.

c. All information for the preparation of the inventory of work orders, submitted to REA to justify request for advance of funds, comes from two sources; (1) construction work orders, (2) Retirement Work Orders.

Accounting for funds previously advanced for meters, transformers, etc. is no longer required on the inventory.

The detailed calculations to unitize and distribute costs to plant accounts is no longer required on the reverse side of the inventory.

Time required to complete work order and inventory preparation has been greatly reduced. This should aid borrowers to keep general funds in more stable condition.

Mr. Phillips: On page 66 of the Work Order Manual in the top paragraph which discusses setting up the $10,000 contribution. If REA was requested to advance $7,000 on that, and the manual shows they should only show a contribution equal to the amount advanced by REA, what becomes of the $10,000?

(No answer was given to this question at this time.)

Mr. Scoltock: We will try to get the answer to you later.

CONTINUING PROPERTY RECORDS - Geo. H. Cole

Memorandum of March 17, 1952

Under date of March 17, 1952, the old Controller's Division issued an 8-page memorandum on continuing property records. This memorandum pointed out that, with a substantial investment in plant, a systematic recording of plant data and costs in greater detail than is ordinarily carried in the general ledger and subsidiary ledger accounts is needed in the operation of an electric system. Property for record purposes was segregated into two types: (1) plant for which the most suitable record is a separate card or sheet; and (2) mass items of property in which there are a great number of like but small units, such as poles.

In order to establish a CPR it was recommended that plant be divided into 9 different classifications, such as land, clearing of right-of-way, buildings, production plants, substations, and mass-type outdoor plant. For each type of plant shown a short set of instructions was included in this memorandum.

Starting with the last paragraph of page 5 and going through page 8 a method was set forth to record, on a continuing plan, costs of mass-type outdoor plant. The first step recommended is to obtain a summary of all units of property owned at a certain time, such as the end of a year, properly correlated with the general maps of the system. The second step is the unit pricing of this outdoor mass-type plant. It is pointed out that there are several accepted methods; however, to simplify a CPR and to eliminate undue refinement it is recommended that average prices be used. Where costs are accurately segregated by primary accounts it is recommended that all construction units be classified by primary accounts and summarized by common units. The unit price of each class of unit should then be determined by review of the construction inventory prices and the prices shown on large inventories of work orders. Based upon this review each borrower should estimate the average cost of each common construction unit. The quantity of each unit is then to be multiplied by the estimated unit cost to obtain the total cost for each group. The group totals should then be added and the total estimated cost compared with primary plant account balances. The ratio of the total estimated cost to the balance in the primary account produces a factor which should be used to adjust the estimated unit costs, down or up, as the case may be, so that the sum of all unit costs will equal the total in the primary account. The third step, namely, the conversion of the costs to record units is not shown in that memorandum but will be discussed later herein.

Record Units

Bulletin 181-2, entitled "Standard List of Retirement Units," includes an Appendix on pages 37 to 40. This Appendix was incorporated in that Bulletin to aid borrowers in selecting record units. In other words, this appendix suggests the grouping to be made of the various retirement units relating to outside lines to form record units.

If a card were maintained on each item of property owned by a borrower, retirement and record units would be identical. In the case of meters, transformers, OCR's, sectionalizers, regulators, capacitors, and certain other items, it is recommended that such individual cards be maintained on each specific item. However, it is believed that it would be an undue refinement for record purposes to maintain individual cards on the other type mass items. To eliminate this need of individual cards, certain items are grouped. As an example, each ground is considered as common with all other grounds. The same is true of crossarms. In the case of poles it is recommended that 3 groups be maintained, as the cost differential between a pole 50 ft. in length, for example, and a 35 ft. pole is considerable.

By studying the appendix in Bulletin 181-2 each borrower should select the specific record units which it will maintain in the future. This is another step in establishing a CPR.

Conversion of Construction Assemblies to Record Units

For all presently owned electric plant each borrower should be able to summarize its costs by construction units. This is done by following the recommendations set forth above. The final step in establishing the CPR is to convert the various construction units and the costs of those units to the new record units. To illustrate how this is done, we have taken a typical final inventory including approximately 90 construction units and converted those units into 19 record units.

The method followed is to divide the construction units into two classes, that is, those units which are the same for construction and record purposes, such as a pole. Another example in conductor units. In the case of anchor-guy assemblies, the dollar amounts applicable to both guys and anchors are added together; however, only the anchor units are added to arrive at the number of anchor-guy assemblies.

The costs of the following construction units are either merged with other unit costs or are converted to one or more record units: (1) pole top assembly units designated as A, B, and C units; (2) J and K units which become part of pole units or service drops; (3) M3 units relating to OCR's and sectionalizers which are broken down into crossarms, conductor, insulator strings, lightning arresters and equipment items themselves; (4) G units relating to transformers which are broken down, with some of the costs relating to pole units and various size transformers; in addition, these units might also include crossarms, lightning arresters and cutouts.

This allocation of costs of construction units to record units calls for a considerable amount of judgment. To aid in this allocation of costs we have shown the various percentages allocated to the various units for approximately 60 construction units listed in the typical inventory. We expect to study all units which are common to most borrowers' systems and to establish percentages to be used as a basis for allocating these costs. For the more complicated assemblies, such as a G325-25, each borrower will be expected to study this type of assembly separately and make separate allocations to the various record units included in those assemblies.

ANALYSIS BY RATIOS -- Joseph H. McCombs -- JOINT MEETING OF OPERATIONS SECTIONS

Analysis by ratios is not as complex as it might sound; in fact, it is quite simple. In our daily life we unconsciously analyze most of our problems by ratios. Your wife's household allowance is in relation to your income. The cost of the automobile you buy is related to how much you can afford. Even the rent you pay for an apartment is controlled by your income.

The gage and results of the management of your personal affairs are a result of applying proper ratios to your income, expenses, investments, etc. In your personal affairs, this is generally done without formal consideration.

In the case of a business, however, it requires a more impersonal and more formal consideration. It is necessary to formulize our analysis. In any business there are two primary ratios - the Investment Ratio and the Operating Ratio. The Investment Ratio is indicative of the feasibility of the investment while the Operating Ratio is indicative of the efficiency of the operations. Taken together in their proper relation, they are indicative of the quality of this particular phase of management. Before you can successfully proceed with ratio analysis, it is important that you have confidence in the results obtained by this system of analysis.

You have been handed a sheet entitled "Surplus Expressed in Ratios and Investment." What every business is interested in is surplus, or profits. By algebraic formula you can see that knowing how much money you have invested and applying only the two ratios (Investment Ratio and Operating Ratio) you can arrive at the profit the business will earn. If you are convinced that this is correct, then we can go ahead with our analysis.

The Investment Ratio is simply the relation of investment to income from this investment. When you buy stocks you are interested in their yield -- whether you buy A.T.&T. stock at $150.00 a share, paying a dividend of $9.00 per share per year, or whether you buy General Motors at $67.00 a share, paying $4.00 per share per year, the yield is 6%, and it is the yield you are interested in.

The Operating Ratio is the relation of the revenue produced by the business to the expense of conducting the business. This ratio is more complex than the investment ratio and we will discuss this ratio at some length later on.

It should be noted, however, that the common denominator of both these ratios is gross revenue. To improve each or both of these ratios, increased revenue is of primary importance -- it does not benefit a business to make or have for sale a product unless it is put into the hands of the ultimate consumer at a reasonable profit. In order to insure this reasonable profit, to the wholesale cost of the product for sale is added a "Mark Up" -- this "Mark Up" is the cost of carrying on the business plus the profit or surplus to be obtained. This "Mark Up" is controlled:

(1) by the efficiency of the management.
(2) by the amount of business (sales).
(3) by the desired amount of profit.

Now the particular business in which we are presently interested is Rural Electric Cooperatives.

So, our Investment Ratio becomes the gross receipts from the sale of electric service divided by the amount of money these cooperatives have borrowed from REA on which they have to pay debt service.

This ratio can be improved by:
(1) Increasing sales of KWH.
(2) Increasing Density.
(3) Economical Engineering Design.

Our Operating Ratio becomes the gross operating expense divided by the gross operating revenue, and because we are selling a service instead of a product the cost of electric service (KWH) to the cooperative must be the cost delivered. The "Mark Up" then would be (1-Operating Ratio) to provide for debt service, reserves, etc.

This ratio can be improved by:
(1) Increasing sales of KWH.
(2) Efficient management (Decreasing controllable expenses).
(3) Increasing rates.

Also, this ratio would be improved by:
(1) Decrease in power cost from supplier.
(2) Decreased taxes.
(3) Decreased insurance.
(4) Decreased interest rate on borrowed money.

There may be other elements affecting the Investment and the Operating Ratios but I believe the more important have been listed.

The secondary ratios relating to the Investment Ratio are:
(1) Investment per mile of line.
(2) Investment per consumer.
(3) Gross revenue per mile of line.

The investment per mile of line is difficult to control. The increase in cost of material and labor is the chief contributing factor in the increase of cost of the line mile. Nevertheless, it is a factor that can and must be controlled within limits. The cost of construction can reach a figure that will destroy the feasibility of most extensions. It is a problem which the engineers should attack most diligently with all the assistance the manager can give them. Difficult terrain should be avoided where practical. Law suits and right-of-way difficulties are expensive and contribute to line cost. Unnecessary delays can further add to the per mile cost. Never stop trying to improve this ratio.

The investment per consumer is less difficult to control than the investment per mile. The normal increase of consumers along existing electric lines will improve this ratio. The use of the most economical sizes of transformers and service drops should be given serious consideration. Extensions where cost per consumer is excessive, particularly in light of revenue to be received, should well be considered.

Gross revenue per mile of line is a question of original feasibility and future load building. The activity to improve this ratio by an active load building program is, of course, a continuing must.

The secondary ratios relating to the Operating Ratio are:

(1) Operating Revenue.
  (a) Per $1,000 of investment.
  (b) Per mile.
  (c) Per consumer.

(2) Operating expense.
  (a) Per mile.
  (b) Per consumer.
  (c) Percent of revenue.

(3) Operating expense less wholesale power.
  (a) Per mile.
  (b) Per consumer.
  (c) Percent of revenue.

(4) Power Cost.
  (a) Cents per KWH.
  (b) Percent of revenue.

(5) Operations.
  (a) Per mile.
  (b) Percent of revenue.

(6) Maintenance.
  (a) Per mile.
  (b) Percent of revenue.

(7) Accounting and Collecting.
  (a) Per consumer.
  (b) Percent of revenue.

(8) General Office Salaries and Expense.
  (a) Per consumer.
  (b) Percent of revenue.

(9) Taxes.
  (a) Percent plant investment.
  (b) Percent revenue.

As previously stated, the Operating Ratio is more complex than the Investment Ratio, not only because it contains more elements, but experience with these elements as affecting electric distribution cooperatives is limited.

You will note that expense items are considered with their relation to gross revenue rather than total investment. We recognize that it is customary to relate these expense items to investment. The difference in these two viewpoints might be explained by stating that the relation to gross revenue is indicative as to the expense that might safely be incurred without impairing the financial soundness of the borrower, while the relationship to total investment would be indicative as to the expense that should be incurred to secure ideal operating efficiency.

Frankly, we have not had sufficient experience in the operation of Rural Electric Cooperatives to determine just what amount should be spent to obtain ideal operating efficiency,

Since most of the borrowers are in the early stages of operation, operating expense requirements are not large as compared to investment, but by the same reasoning they are quite large with respect to Gross Revenue; therefore, this Gross Revenue must be budgeted wisely to secure the greatest operating efficiency.

With this in mind, we have found that based on several years of experience records show that the largest single item of expense is purchased power, averaging 25.825% of Gross Revenue.

Cost of Power is often listed as one of the uncontrollable expenses. We do not agree with this. The real cost of Power Sold is the cost at the consumer's meter, and much can be done to control this cost.

There are two ratios to be watched in reviewing the Cost of Purchased Power: the "average cost of power sold" and the "percent line loss."

A sizeable increase in the average cost of power sold or a continued increase in this ratio should be investigated. The answer may be found in a number of items, or any one of the number of items.

If there is a sudden increase in the "Cost of Power Sold" the power bills should be examined to ascertain if the increased cost is due to increased demand or increased energy, or both. Increased demand without increased energy probably means that some transit disturbance has caused the demand indicator to register an abnormal condition, which if satisfactorily substantiated, the power company will generally adjust. This condition might be caused by lightning or a high resistance short or ground, or by a large load of very short duration. If the energy has increased sharply but not the demand, meter reading dates should be compared. If it is found that the sudden increase is due to the fact that the power company read its meters late and that you are being billed for say 36 days' consumption instead of a 30-day consumption, there is nothing to worry about as it will be adjusted on subsequent months' readings. Other causes of high energy increases are indicated by percent line loss and will be explored in discussing that ratio. Should both the demand and the energy show a sharp unexplainable increase, you should ask the power company for a meter check. It is possible

that the meter has been incorrectly read. Also, the metering transformers may be off ratio. Metering transformer connections should be checked. This is particularly true where two element meters are used. By watching this we recently were able to secure a $3,000.00 refund to one of the borrowers for overcharge by the utility.

Percentage Line Loss is indicative of not only Line Loss but of the entire unmeasured increment. From a borrower's standpoint, Line Loss includes line conductor loss, transformer losses, meter losses, stolen current, unmetered current, leakage, loss due to low voltage; in fact, every increment that goes to make up the difference between the substation meter reading and the sum of all the consumer meter readings on the cooperative's system. Obviously, there are many things that a manager can do to decrease his Line Loss. Some of these are: See that all consumers are metered; the proper loading of transformers; right-of-way clearance to prevent leakage; maintain proper voltage, etc. Unfortunately, we in Washington cannot segregate the elements of Line Loss from the records we have available. We only know that 12% Line Loss is about the lowest that can be expected and that there is no reason to be concerned if the Line Loss does not exceed 20%. We only call Line Loss to the attention of systems five years old and over who exceed the 20% figure. This does not mean that if any system is in trouble we neglect the possibility of improving Line Loss regardless of value.

Next to the Cost of Power, Maintenance and Operation is the most important item of expense. Maintenance averages approximately 4.693% of Gross Revenue and Operation Expense averages approximately 7.444% of Gross. We like to consider these two items simultaneously. First, because of the lack of care in charging to the proper accounts these items of expense, and secondly, because the two items are so closely related in their physical execution.

We estimate the average borrower over five years old is now operating with a system condition approximately 80 to 85%. It has been established that a system condition of 70% will give satisfactory service at an economical cost.

We use the principle of averaging mass practice to arrive at a satisfactory current condition which gives us the percentages referred to above. These are checked yearly and changed when necessary. Through this method we feel that we get a realistic cost of maintenance that can be borne by the borrower without jeopardizing its financial position. This percentage is recommended as not only being within the limits of cost the borrower can afford, but as being necessary to maintain the system at a satisfactory level. By this method, the "condition level" is dropped in an orderly manner until maintenance requirements are stabilized at a point where further decrease in condition level would jeopardize satisfactory service and system economy. At this point, it will become necessary to base our percentages on plant investment figures, which have been determined as adequate to maintain Plant Condition on a continuing basis, rather than on a Gross Revenue Basis.

This point of change may be determined from the relation between Total Investment and Depreciated Cost of Utility Plant. When the Depreciated Cost of Utility Plant becomes 70% of Total Investment, we assume that the total plant has reached a 70% condition. We realize that this is subject

to question, but it is the best we can do from the information included on the operating reports. Assuming that normal maintenance has been kept current, this will be very close to a reasonable figure.

ORGANIZATION, OPERATIONS, FINANCIAL PROBLEMS GROUP DISCUSSION -- JOINT MEETING OF OPERATIONS SECTIONS

The group discussed developing an organization and staffing that organization along at the same time that the actual chart was being developed. It was generally agreed that cooperative work falls in four functions or divisions: office management, construction and maintenance, operations, and sales promotion. It was agreed that the functions of each of these divisions should be established prior to the staffing of that division.

Need for employee training was recognized as a problem. It was also pointed out that some of the so-called poorer managers have the problem of not being able to delegate their work. The location and selection of competent persons to fill manager jobs when they became vacant was recognized as a problem. The group opposed REA keeping a list of assistant managers available for use by cooperatives that had openings for managers. It was pointed out that many boards of directors have no knowledge of the organization and staffing requirements of a cooperative, or of the type of person and qualifications of that person to fill the job of manager. As a result, generally, capable people of the caliber necessary to handle the job just do not apply for the job. Standards for the job of manager have not been established in the minds of the board to the extent that the board will look for properly trained applicants. The dignity of the job has not been built up. It was generally felt that contracts for managers were not good.

Four points were made in an effort to do something about solving the above problems:

1. Strive to create an awareness on the part of the board of the importance of selecting the person with qualifications essential to handle the job, and to have someone in the organization who has the ability to be an understudy for that job.

2. Try to get borrowers to employ capable and well-trained people from the bottom up that have the ability to advance when an opening occurs.

3. The Georgia and South Carolina area boards of directors meetings were pointed out as being quite successful in board education along this line. It is anticipated that there is a great need for following these area directors meetings with similar meetings at least semi-annually.

4. Executive development programs sponsored by a Statewide committee and staffed by the State university could be used for successfully developing managers into executives. State universities are anxious to do this if given the chance.

The financial operations of a cooperative were discussed by using an operating report, Form ADM-7, and discussing in detail each item on that report. Numerous significant things came to light as a result of this discussion, such

as the fact that approximately one-half of all consumers of the cooperative do not pay their way; the "Other Deferred Debits" account should be kept at zero; consumer deposits and membership fees should have enough attention to balance properly; unclassified electric plant in service and loan funds unadvanced may be used as a tool to determine to some extent whether a new loan is needed at that time. It was agreed that non-operating margins should be left as such for the time being and not distributed to patronage capital. Most consumer classifications are wrong and will require attention in the future. Delinquent accounts, line loss, material inventory, idle services, substation data, number of employees inside and out, overtime, cost per mile of travel, were recognized as controls that could be used by a board of directors if the board understood more clearly how to get this information from the operating reports.

JOINT MEETING OF OPERATIONS SECTIONS - GENERAL SUMMARY OF TOPICS DISCUSSED

Statistical Data: - John B. Coon

Original data available - operating reports, etc.
Presentation to the Board - explanation and review of data.
Compilation of data on 5 years of actual operations:

1. Showing what cooperative has to do business with;

2. Statement of Revenues and Expenses -- operating report;

3. Analysis of Cash Income;

4. Year to year effect on net worth.

Exhibit 4 explained.
The Forecast - its value and projection for the years 1954 through 1963.
Discussion with the Board - explanation of Forecast, its value, use, preparation.

Goals and Progress Charts: - Odea Evans

Problem Cooperatives - how a definite plan can help.
Establishment of a plan through preparation of Form 811a, "Analysis and Projection of System Operations."
Explanation and presentation of chart - Form 811a. (This was well presented and received.)

Budgets: - Max U. S. Colbert

Purpose - Master your money rather than let it master you. Tell your money where to go rather than wait and see where it went.
Valuable for future planning.
Through use and preparation, it makes familiar your future operations.
Suggest budget be reviewed about every three months, or sooner.
Make periodic checks on budgets submitted. Are they out of line? Should they be revised?

Baling Charts: - Eugene V. Dabney

Financial ability to make debt service.
Explanation and discussion.
The chart was considered a management tool, and was well received by those present.

Health Chart: - Richard F. Nance

Much information available to O.F.R. for personal use.
Chart presents very few questions.
Form speaks for itself.

OPERATIONS SECTION II MEETING - GENERAL SUMMARY OF TOPICS DISCUSSED

During this session the need for and the establishment of a priority for kwh estimates, power requirement studies, and debt service requirements were reviewed and discussed.

A priority routing for Mr. Coon was also discussed. It was decided he would go first to Georgia 103 Coweta, then to Georgia 74 Jefferson, and finally to South Carolina 36 Barnwell. It was felt that after Mr. Coon had covered these three in about six weeks further assignments in the Area would be ready for him.

Cooperatives not on the priority list but making less than 115% of debt service were discussed as being on a secondary list for concentrated attention.

OPERATIONS SECTION III - GENERAL SUMMARY OF TOPICS DISCUSSED

The topic for discussion was problem borrowers, and it began with a review of the digest. The health chart was discussed by States in regard to the debt service earned ratio. The monthly average statistical report for each State was also reviewed. Individual cases where a cooperative did not earn 100% of debt service were reviewed.

Mississippi 23 Copiah:

Mississippi 23 was discussed with James Black, OFR, and his theory was that this is only a temporary problem as the borrower's DSER for 1953 indicated 98%. However, each item was thoroughly discussed. Mr. Black offered some reasons in the discussion for the 1953 results. A digest will be prepared and a plan of achievement will be discussed with the cooperative by Mr. Black.

Mississippi 20 Yazoo:

This cooperative was then reviewed with reference to the monthly statistical average report as compared with the State averages. It was determined that this system will be restudied as to future requirements. The DSER decreased in 1953 to 92%. A complete digest will be prepared, and a program will be suggested. Several items of urgent importance were considered for this borrower. First, there is a loan application now pending for 2,000 new services which is the result of an area coverage

survey recently completed. Second, the cooperative recently had a change of managers which indicated that some of the causes of the present problems are due to poor management in previous years.

Alabama 39 LaMar:

The monthly average statistical report was reviewed with regard to the State averages and the present averages of this borrower, whose DSER for 1953 indicated 83%. It was determined that part of the problem here is due to the fact that the borrower is serving a fairly poor, thin, area which requires a consumer use development program. However, since the borrower is only 70 months of age, no digest will be required at this time.

Kentucky 37 Owen:

The monthly average statistical report was discussed with regard to their present averages as compared with the State averages. It was determined that heavy right-of-way clearing was mainly the cause of low debt service due to high maintenance cost as well as the operation cost of the maintenance crews. Mr. Evans reported that since changing the areas for the maintenance crews, travel has been reduced by 700 miles in the last several months with a further reduction in this category to come. A digest will be prepared to review a plan for future achievement. Various follow-ups will be made according to procedure. The low revenue and the high expenses seemed to be the determining factors in this case.

Further discussion was held regarding the balance of the borrowers who were shown on the health chart to be problem borrowers and those that will require a digest or follow-up by the OFR. The general discussion which followed concluded this session.

SYSTEM STUDIES -- ENGINEERING SECTION MEETINGS -- A. E. Loetterle and Henry M. Alford

A general discussion was held on preparation and review of system studies. Specifically, we discussed the "system study contract" DS-215, and the new draft of REA Bulletin 603, "Guide for the Preparation of System Studies," dated March 3, 1954. It was the stated opinion of the field engineers that continued work be accomplished by the REA committee so that REA Bulletin 60-3 can be put out and distributed in final form.

The following parts of REA Bulletin 60-3 were discussed in detail:

Section II - The entire section
Section IV - Parts A, 1, 4, 5,
Parts B, 2, 3,
Parts D, 3, b
Parts G and I

During the discussion it was brought out that generally the field engineer should be in on the preparation of the system study from time to time; even before the basic data is prepared, through to the completion of the final draft of the study, as this will benefit by obtaining a better system study design.

It was brought out also that we need to sell system studies on the basis of the need for planning ahead and having a guide for system improvements to take care of system growth. We must get the cooperative's personnel in on all stages of the preparation of the study so that the final draft is their system study. Then they use the study as a guide.

The additional costs the borrower incurs by installing system improvements prematurely was emphasized. When system improvements are installed prematurely there is also the danger that investments will be made in system improvements that will not be needed later.

COMMENT ON SYSTEM STUDY

Mr. Phillips: Experience indicates that for the protection of REA and the borrower, the field engineer should assure himself that the borrower's maps are in order before REA gives approval to the system study contract. It is recommended that this be a requirement for contract approval. The field engineer should forward REA a memorandum advising the adequacy of the maps for study work.

TRANSMISSION LINE DESIGN -- ENGINEERING SECTION MEETINGS

Selection of Ruling Span -- Julius S. Strojny

Introductory discussion established the importance of obtaining the proper ruling span in transmission line design. It is established after the conductor is determined and the terrain is analyzed. Why is it important?

Its proper choice will permit the best average sags and tensions for a line of non-uniform span lengths.

If the ruling span tension is too high, early fatigue of the conductor may result.

If it is too loose it will be uneconomical because taller poles will be required.

A properly chosen ruling span will reduce insulator swings and permit fewer deadends.

Definition -- Julius S. Strojny

A ruling span is the one span in a line between deadends from which sags and tension for all the other spans are developed. How is ruling span determined:

1. By formula R.S = Ave. Span & 2/3 (May Span - Ave. Span)
   In the profile method span lengths are not know. Therefore, other methods are used.

2. It is usually determined by analyzing the terrain and from studying conductor sag and tension charts. The sag and tension charts were illustrated on the blackboard. Fifty percent design tension is used.

   Stringing tables are developed from the parabola equation $y = px^2$, reference to NESC.

3. Discussed ruling span from standpoint of field engineers' review

Determination of Pole Height and Class -- Julius S. Strojny

1. Normal level ground span is determined.

2. Pole strength is determined from pole chart TM-18 for various pole sizes.

3. From the combination, pole height is selected.

4. Equations and computations illustrated on the blackboard.

Miscellaneous -- Julius S. Strojny

Insulator swing chart.

Demonstrate profile spotting.

How to review plan and profile sheets.

Computations for insulator swing were derived and explained.

Actual profile sheets.

Span Limitations -- James J. Phillips

Reference was made to three memorandums of George H. Cole dated January 10, 1953, February 10, 1953 and August 18, 1953, addressed to all field engineers in the Western Area. These memorandums related to the calculation of maximum spans. Procedure for the calculation was as follows:

1. Use N.E.S.C. formula for separation according to sag.

2. Refer to dimensions of applicable structure to determine support separation.

3. Knowing support separation and line KV, solve for allowable sag per N.E.S.C. formula.

4. Use 65% of sag valve determined in step 3.

5. Obtain from conductor data book the ruling span sag of the selected conductor, at 60 degrees final sag.

6. Determine maximum span by the following formula:

$$\frac{(\text{Ruling Span})^2}{\text{Ruling Span Sag}} = \frac{(\text{Max. span})^2}{\text{Max. Span Sag}}$$

It was pointed out that in actual practice the maximum span obtained by this method was seldom reached due to structure strength limitations or other design considerations.

It was noted that the 65% factor (in step 4) yielded results in line with results obtained from use of the Standard EE Handbook formula, which includes consideration of "Experience Factors."

It was also noted that no modification of the NESC separation formula was necessary, except possibly in rare instances, in distribution design. With conductor sizes used in distribution support clearance usually is much more critical a consideration than structure strength considerations.

Discussed Line Angle Limitation -- James B. Davis

1. Development of formulae for:

   a. Maximum angle of insulator swing.
   b. Normal angle of insulator swing.
   c. Minimum angle of insulator swing.

2. Discussion of:

   a. Minimum clearance of conductor from supporting structures.
   b. Normal clearance of conductor from supporting structures.

3. Discussion of factors affecting insulator swing:

   a. Conductor tension.
   b. Temperature.
   c. Wind loading.
   d. Horizontal and vertical spaces.

4. Correction of excessive insulator swing:

   a. Structure relocation.
   b. Change of structure height.

Guys and Anchors -- Henry M. Alford

A general discussion was had on guys and anchors as regards fundamentals. Then the discussion was brought into specific consideration of guys and anchors as regards transmission line design, and the calculations for preparation of a TM-6 for transmission line use.

It was brought out that a metal anchor had been approved as an alternate for the 5' log anchor. The question was raised if this was so stated in the plans and specifications and the contract, would the contractor have the privilege of installing either at his discretion? Or would the anchor have to be installed as specified by the engineer on the plan and profile and structure list and not have any leeway to substitution?

Template Preparation and Application -- James H. Phillips

A group discussion of this subject was held and based on information in the transmission line manual, pages 19 and 23, and TM-7. Mr. Julius S. Strojny then reviewed this subject in a comprehensive manner and illustrated the spotting of structures on a profile. The field engineers took an active part in making "practice runs" with a template, checking uplift, pole strength, cross arm loading, etc.

Plan and Profile - Transmission Systems -- J. Brooks Mabry

Any major construction program or project requires a plan. With the plan goes an elevation or profile.

The design engineer cannot present an accurate design unless he has an accurate plan and profile from which to work.

The Plan should include all the information pertaining to the route where the center line has been located. The following should have special attention:

Property lines Fences Creeks Rivers Ditch Highways Roads Trails Woods Cultivation Orchards Swamps Buildings (description) Telephone lines Electric lines Railroads	Station locations properly identified.

Question by J. Brooks Mabry

Can we change plans and specifications on transmission lines to properly identify danger timber.

Present specifications read -- Any tree that will fall within 5 feet of a vertical point underneath the outside conductor. This should read within 5 feet of conductor and not a vertical point.

ENGINEERING SECTION MEETINGS - GENERAL

The Engineering Section meetings also included a technical discussion of the following subjects:

1. Application of Shunt Capacitors.
2. Application of Automatic Circuit Reclosers.
3. Application of Voltage Regulators.
4. Distribution Transformer Loading.
5. Grounding.

ACCOUNTING SECTION MEETINGS

The following is a brief outline of the topics covered during the meetings of the Accounting Section:

Discussion of Depreciation Rates - George T. Gilleland

Revision of Manual of Accounts - George T. Gilleland

Renewal and Replacement Fund - Roland A. Blass

Accounting for installation of meters and transformers, OCB, Sectionalizers, etc., at standard costs as suggested under the new accounting procedure in the Work Order Manual. - George T. Gilleland and Roland A. Blass

Continuation of discussion of work order procedure, including flow charts - L. A. McCarthy

Discussion of review of Construction Disbursements and Expenditure Reports, and adjusting the Expenditure Reports. This included a review and discussion of the rough draft of Staff Instruction 741-2.

Discussion of CPA Audit review letters and audit review comments - George T. Gilleland

Discussion and interpretation of REA Bulletin 103-2, "Establishing and Investing Reserve Funds." - L. A. McCarthy

Capital Credits - Policies, assignable amounts, assigned amounts, etc., and the various effects upon the members of the cooperatives as far as public relations are concerned. - Roland A. Blass

Discussion and interpretation of REA Bulletin 182-1, "Check List for Evaluation of Internal Control." - L. A. McCarthy

Travel Itineraries, Appointments and Contacts with Borrowers; Staff Instruction 670-3 on Travel Itineraries; headquarters locations; changes in assignments, appointments, etc.

ADMINISTRATIVE MATTERS - John H. Scoltock

Field Activity Reports:

1. To be of any value they must be kept up to date.

2. They should be submitted within one work week of the completion of any specific assignment.

3. They must be up to date before the respective month's travel voucher is approved.

4. Quality, not quantity, should be the guide for the report's contents.

Travel Vouchers:

1. Delays in processing will be reduced if more care is given to accuracy.

2. They must be in agreement with field activities reports.

3. They should be submitted within five days after the end of each month.

Itineraries and Appointments:

1. Proposed monthly itineraries should be submitted by the 20th of the preceding month.

2. The estimated travel allowance requirement should accompany the proposed itinerary.

3. Field personnel are expected to make their own appointments and also cancel appointments in the event circumstances make that necessary. A few instances of non-kept appointments have brought critical comments from borrowers.

Annual Leave:

1. The maximum accumulation of unused annual leave that may be carried over into a new year is 30 days.

2. All employees with an accumulation of more than 30 days annual leave must reduce this excess by at least 10% by the end of 1954, and 10% each succeeding year.

3. Each employee is to arrange with his supervisor for a schedule of annual leave for the entire year.

Cooperation Among Field Staff:

1. All field people working with the same borrowers should consider themselves as a team, each member of which has a specialty and responsibility to the borrowers and REA.

2. It is desirable for field people working with the same borrowers to get together periodically to exchange ideas and information, and to discuss problems needing attention.

SUMMARY OF QUESTIONS, ANSWERS, AND RECOMMENDATIONS

Q. In working with borrowers on the development of remedial plans to overcome loan security problems (Staff Instruction 100-1R1), at what time should the engineering Review of Electric System as Related to System Operations and Maintenance (Staff Instruction 161-1R1) be commenced by the field engineer?

A. After receiving the digest and other initial data for discussion with the borrower, the operations field representative will contact the field engineer, and if possible, make arrangements for both to visit the borrower jointly as a team. In the event circumstances make it impossible for the operations field representative and the field engineer to schedule a joint meeting with the borrower without undue delay, the operations field representative will proceed with the meeting himself and explain to the manager that the inspection and appraisal described in REA Bulletin 161-5R1 is a part of the overall analysis to be made in connection with developing a remedial plan. The operations field representative should inform the borrower that the field engineer will schedule the inspection as soon as he can. He will then notify the field engineer that the initial discussion has been held with the borrower concerning the development of the remedial plan, and the scheduling of the inspection and appraisal is in order.

Q. Will Section V loans in excess of $50,000 be considered in the future?

A. Generally speaking, it is expected that each separate Section V loan will be limited to $50,000. However, subsequent loans within this limitation may be made if the need is shown. In special cases loans in excess of $50,000 will be considered if sufficient justification is presented. In all cases it is necessary that borrowers determine that loans fulfilling its members' needs are not available from other sources.

Q. What is the policy of REA toward making loans to reimburse borrowers' general funds for approved construction financed therefrom?

A. REA will consider requests for such loans. The test as to whether such loans will be made will be based on availability of loan funds and the relative needs by various borrowers.

Q. Will REA still make operating loans for storm damage repairs?

A. Each such case will be considered on its own merits. Such loans will be considered if the need is shown and loan funds are available.

RECOMMENDATIONS:

1. That in view of the special opportunities at interim field conferences for full discussions of field representatives' own work problems and responsibilities, interim field conferences should be continued, semi-annually if possible. A number of comments were expressed that if any conferences were discontinued it should be the June conferences rather than interim conferences.

2. That when borrowers with special problems are being considered and discussed at our conferences, all field representatives concerned, operations, engineers, and accountants, should participate in the discussions.

3. That REA prepare a typical plan of remedial action as a guide for field representatives. It is recognized that each borrower requiring a remedial plan will be a special problem calling for individual analysis. However, it is felt that there are sufficient typical causes for security problems that will make a typical remedial plan possible.

4. That REA complete the new work order manual at the earliest possible date.

5. That REA Bulletin 103-2 be revised for the purpose of clarifying confusion which apparently exists concerning the establishment of the Renewal and Replacement Reserve Funds, and how the fund is actually used to defray replacement costs. Also, to what extent REA recommends that surplus funds be used to finance construction, to be applied on indebtedness to REA as a cushion of credit, or otherwise invested.

6. That REA require loan applications to be checked in the field before they are sent in to Washington for processing in order to assure more accurate, reliable and adequate data.

7. That REA require a field check of system maps and a statement of adequacy by the field engineer before the system study engineering contract is approved.

8. That field personnel should be invited to submit suggestions for field staff conferences. (It is our general practice to invite such suggestions. However, it was not done in this case due to the limited time available after the decision was made to hold the conference.)

COMMENT ON RECOMMENDATIONS:

All will be given full consideration and such action as is considered appropriate will be taken.